Emerging Investigator Awards (EIA) 2024

Guidance notes

Guidance Notes

Deadline	Key Dates and Times
Applications Open	07 September 2023
Pre-Application closes	09 November 2023
Full Application open (by invitation only)	Mid-January 2024
Full Application closes	Mid-March 2024

Applications must be completed and submitted through the HRB online Grant E-Management System (GEMS) (https://grants.hrb.ie). This system will close automatically at the stated deadline according to the timeline listed above. Applicants are strongly recommended to read Appendix I 'Detailed guidance on the EIA pre-application form' prior to starting an application GEMS.

Table of Contents

1 Introduction

The Health Research Board (HRB) Strategy 2021 – 2025 [1] highlights six strategic objectives for the HRB, including the building of a strong and supportive environment for health research in Ireland. In partnership with a wide range of stakeholders, the HRB will work to ensure that funding for researchers and infrastructure is delivered effectively, that the highest standards of governance, quality and ethics are met, and that innovative practices are developed and taken up here in Ireland.

Within this objective, the HRB is committed to invest strategically in research leadership and build the capacity of academic researchers and health and social care practitioners to respond to current and emerging health research needs. The HRB will work with national and international partners to facilitate training and exchange opportunities that address skills gaps aligned with the HRB research career framework and the HRB strategy.

The Emerging investigator Awards (EIA) scheme is part of a broader suite of HRB career supports and is targeted at postdoctoral researchers from different disciplines who are engaged in health-related research activities, who have a PhD (or PhD equivalency) and who are ready to become independent investigators, bridging a critical career transition between postdoctoral and research independence stages.

This is the fourth round of this scheme with 32 awards made between 2017 and 2022. The Emerging Investigator Awards 2024 will use a two-stage application process with full applications invited on the basis of shortlisted pre-applications.

2 Aims and Objectives

The overarching **aim** of the HRB Emerging Investigator Awards is to develop a cohort of new and talented independent investigators in the Republic of Ireland by facilitating and supporting their transition towards research independence, in line with the research career path for academic researchers (see Appendix V).

The main objectives of this scheme are to:

1. Support talented individuals at a critical career transition stage to establish themselves as independent investigators in an academic or other research-based institution.
2. Develop collaborative researchers who can facilitate actionable knowledge by:
    a) Translating knowledge generated through research into the health care system, policies, or practice.

    or

    b) Generating research findings informed by policy and practice.

This scheme targets individuals who have already consolidated their research knowledge, skills, methodologies, and capabilities, through a period of mentored postdoctoral research, and are currently progressing them by increasing or establishing strong national, international and/or cross-

[1] https://www.hrb.ie/strategy-2025/

disciplinary and/or cross-sectoral collaborations and networks and are ready to transition towards becoming independent researchers. The career stage supported through this initiative is transition from postdoctoral to investigator stages. Although there is no upper limit set for the number of years a prospective applicant to this scheme should have spent in postdoctoral positions prior to application, this scheme is not targeted towards individuals who have already established research independence as explained in section 6.2.2.2 Career Stage.

3 Summary of Revisions for the EIA 2024

The following revisions to the scheme have been applied based on the following:

1. HRB staff experiences from previous rounds.
2. Panel member feedback from previous rounds.
3. Feedback from consultations with EIA award recipients in previous rounds (EIA 2017 and 2019) and feedback received about the scheme from Research Offices' representatives from Host Institutions in receipt of EIA awards.

3.1 Funding

Postgraduate fees are now a flat rate of €5,500 per annum.

3.2 Mentorship

Lead Applicants **must** nominate two mentors, a **Scientific** and a **Host Institution Mentor**.
Full details of Mentorship requirements can be found here.

4 Scope of Call

The scheme will support individuals who can generate knowledge in the area of **patient oriented, population health, and/or health services research** with a view to translating their findings into practice and/or policy. Additional information on the call remits is in Appendix II.

The case for the questions posed and the related methodology, partners, and knowledge users[2] must be clearly and convincingly set out in the application form.[3]

This scheme will not fund:

1. Applications involving basic biomedical research.

[2] For the purposes of this scheme a **Knowledge User** is defined as all those who would be able to use research results to inform their decisions. This includes clinicians, managers, policy makers, patients/families and others.

[3] The case for the proposed applied project should summarise where the need is documented (e.g., Department of Health or HSE Strategy, WHO, other). In addition, it is expected that that evidence supporting the case for the project has been gathered systematically, i.e., a systematic review or other evidence synthesis formats. Anecdotal evidence or simple literature overviews are not considered sufficient.

2. Applications using cell lines, animals or their tissue that do not constitute pre-clinical research (see Appendix II for a definition of pre-clinical research in the context of this scheme).
3. Stand-alone systematic reviews.
4. Applications seeking to evaluate an intervention.
5. Applications that aim to conduct a stand-alone feasibility study for an intervention.
6. Applications which are solely or predominately health service developments or implementation of an intervention without a predominant research element. The HRB will not fund the cost of providing the service or intervention itself, only the research element.
7. Applications which are solely literature reviews, audits, surveys, needs assessments or technology development (although these elements may be part of an integrated research study).
8. Applications which are solely or predominately developing the infrastructure for biobanking, databases or patient registers without a predominant research element.
9. Applications from individuals applying for, holding, or employed under a research grant from the Tobacco industry.
10. Research intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer.

Where an application is outside the scope of the scheme, the application may be deemed ineligible by the HRB or the review panel.

5 Funding Available, Duration and Start Date

5.1 Funding Available

The HRB has in the region of **€7M** available to support awards in this round.

5.1.1 Salary-related costs for the Lead Applicant

Salary must be requested to ensure the applicant has an appropriate level of protected time to engage in the research activities proposed. The HRB will fund the Lead Applicant's salary and related costs for a maximum of 48 months (1.0 FTE).

However, in line with the vision statement and commitment for Equality, Diversity and Inclusion[4] (EDI), part time arrangements may be proposed because of personal circumstances. Lead Applicants will need to demonstrate that they can meet the aims and objectives of the EIA scheme with part-time arrangements.

The salary must be in line with most recent **IUA scale of Level 3 point 1** in recognition of the Lead Applicant's career stage upon receiving an EIA award. Where an applicant's current salary is higher than Level 3 point 1, a higher point on the Level 3 scale can be requested and details of their current salary scale and point must be included in the HI letter of support. The maximum level that can be

[4] Our Public Service 2020 - Promote Equality, Diversity and Inclusion Mission Statement (pdf)

requested is Level 3 point 4 with no additional point increments for the duration of the award (Level 4 on the IUA scale is **not** supported).

Please note that the IUA scale is used solely for salary's reference purposes and that awardees are to be considered in all other aspects as independent researchers and not Research Fellows.

5.1.2 Research-related costs

Research-related costs can be requested up to a **maximum of €300K** (excluding overheads). The budget requested **must** reflect the scale and nature of the proposed research and should include appropriate research personnel and appropriate research related costs to carry out the project. Reviewers will thoroughly assess this when reviewing the proposal.

The maximum funding envelope available is not an invitation to apply for the maximum amount.

Research related costs include the following categories:

1. Costs for funded personnel necessary for the proposed research project.
    a) Salary-related costs in line with the most recent IUA researchers' salary scale for academic researchers or the most relevant professional salary scale for buy-out of the health and social care practitioners salary.
    b) Postgraduate candidates support:
        i. A stipend for academic PhD or MSc degrees and a contribution to postgraduate fees at €5,500 per year.
        ii. A contribution to salary for health and social care practitioners conducting a PhD at the maximum level of the IUA researchers' salary scale Research Fellow Point 1 (no additional point increments are allowed) and postgraduate fees at €5,500 per year. The HRB does not support MD degrees.

    Please note if requesting funding for a PhD candidate, you should budget for four years of funding. Additional information regarding the PhD candidates is below.
2. Running costs for the project; e.g. consumables, travel costs (except those relating to dissemination activities as it has a separate heading below).
3. PPI costs.
4. FAIR Data management costs (e.g. service/fees from data steward, access to secondary data, cost for metadata, cost of data sharing, etc.).
5. Equipment, to a maximum value of €50K for start-up costs, where justified.
6. Research and professional skill development for the Lead Applicant and for research staff, where justified.
7. Dissemination to a maximum of €15K and knowledge translation[5] activities.

[5]The HRB views knowledge translation as a broader concept and adopts the definition of integrated Knowledge Translation (iKT) proposed by the Canadian Institutes of Health Research (CIHR)[5] "Knowledge Translation is a dynamic and iterative

5.1.3 Overhead contribution

In accordance with the HRB Policy on Overhead Usage[6], the HRB will contribute to the indirect costs of the research through an overhead payment of 30% of Total Direct Modified Costs (TDMC excludes student fees, equipment, and capital building costs) for laboratory or clinically based research and 25% of Total Direct Modified Costs for desk-based research.

The overhead contribution **will not** be included in the budget at the time of application but will be calculated by the HRB at award stage and included in the overall budget prior to contracting.

5.2 Duration and start date

The duration of the EIA awards is **48 months.**

The earliest start date of the Grant is 01 December 2024

6 Suitability and Eligibility Criteria for the Research Team

This call is not open to Host Institutions from Northern Ireland.

6.1 Applicant team

6.1.1 The team-based and collaborative approach

The application **must** have a team-based and collaborative approach to maximise actionable knowledge and to support the emerging investigator in transitioning towards research independence and develop as a future leader.

The research team is defined as the Lead Applicant, the mentors, Co-Applicants, official collaborators, and funded personnel. The Lead Applicant may collaborate, where appropriate, with partner organisations such as hospitals, health agencies, universities, local government, voluntary organisations and/or industry. The research team needs to be able to address the research question and to facilitate and/or maximise the translation of the research findings towards changes in policy and practice. It therefore should:

1. Contain the necessary **breadth and depth** of expertise in all methodologies, skills and competencies required.
2. Have inter-, multi-, and trans-disciplinary representation appropriate to the research proposed. Members can span academic, healthcare, or other settings as appropriate and all-island and international collaboration are welcome. Where relevant, experts in similar or different disciplines, such as but not limited to biomedical research, statistics, health economics, health service research, behavioural science, qualitative research methodologies, sociology etc., should

process that includes synthesis, dissemination, exchange and the ethically sound application of knowledge to improve health outcomes, provide more effective health services and products and strengthen the health care system."

[6] http://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/hrb-policy-on-usage-of-research-overheads/

be included as Co-Applicants or as official Collaborators. Experts by experience such as patients, potential patients, service users or carers are welcome to be included in the research team.

3. Have public and **patient involvement** or other **stakeholder engagement** as appropriate and relevant to addressing the research question and facilitating actionable knowledge. Experts by experience such as patients, potential patients, service users or carers are welcome to be included in the research team. Decision-makers, policy makers, knowledge users, health agencies and healthcare professionals must be involved throughout the entire research process to ensure integration into policy and practice as relevant to the research question and the national strategic area proposed.

6.2 Lead Applicant

The **Lead Applicant** will serve as the primary point of contact for the HRB during the review process and on the award, if successful. The Lead Applicant will be responsible for the scientific and technical direction of the research programme. They have primary fiduciary responsibility and accountability for carrying out the research within the funding limits awarded and in accordance with the terms and conditions of the HRB.

The scheme provides support to postdoctoral researchers who can make a valuable contribution to their research field and facilitate actionable knowledge in the area of patient-oriented research, health services research and/or population health research and who are capable of becoming independent and self-directed investigators.

Note: Although there is a strong expectation that the majority of the time will be spent on the research set out in the application, it is also expected that during the award the Lead Applicant will be involved in other grant funding applications as Lead applicant , Co-Lead or Co-Applicant, other collaborative/networking activities and that some of the time will be dedicated to other commitments related to the overall research and career development. A small amount of time during the award (i.e. up to 0.1 FTE if taking the award full time or pro-rata otherwise) may be dedicated to teaching or other academic activities.

6.2.1 Lead Applicant suitability

The Emerging Investigator Awards target **postdoctoral researchers** from various disciplines who are engaged in health-related research activities, typically in **academic or other research performing institutions** who have already consolidated their research knowledge, skills, methodologies, and capabilities through a period of mentored postdoctoral research and who are currently progressing towards becoming independent researchers.

Individuals who have already established an independent group by acting as primary supervisor of other researchers (e.g. PhD candidates, postdoctoral researchers, research assistants) and are leading a research programme are not considered `Emerging Investigators'. These individuals fit into the category of Investigators and are encouraged to apply to the suite of investigator-led research schemes.

Lead Applicants must be able demonstrate they have the skills, knowledge and supports necessary to direct the proposed research and to carry the research through to completion by showing:

1. Appropriate evidence of expertise matching the nature and context of the project.

2. A track record of contribution to scientific knowledge demonstrated by relevant research outputs that can prove the lead applicant is ready to transition to research independence. Please note that the HRB is a signatory of the DORA Declaration, and we ask reviewers to consider the value, quality, and impact of the applicant's work.
3. Sufficient expertise, skills, and capabilities to demonstrate the potential of becoming independent investigators.
4. Some experience, capability, and authority to supervise researchers (e.g. early-stage researchers, research assistants, health and social care practitioners), but not as primary supervisors leading research project(s) independently.
5. A track record in securing peer-reviewed grant funding. This may include being Lead Applicant on personal awards and/or fellowships and/or being listed as Co-Applicant and/or collaborator on any other type of research grant.
6. A clear research vision during and beyond the award.
7. A clear career trajectory to become an independent investigator during and beyond the award.

Please note that for individuals who have yet to gain postdoctoral research experience, the HRB also offer the Applying Research into Policy and Practice scheme. It supports this cohort in consolidating and progressing their research knowledge, expertise, and skills post PhD. The next round of the scheme is expected to launch in 2024. Please consult with HRB staff if you are not sure which scheme best fits your research career stage.

6.2.2 Lead Applicant eligibility criteria

The scheme is open to individuals who have the support of a HRB approved Host Institution in the Republic of Ireland.

Lead Applicants **must not** apply to the Emerging Clinician Scientist Awards 2024 scheme at the same time as applying to the EIA scheme.

Only one application per Lead Applicant to this round will be considered.

Where an applicant fails to meet the eligibility criteria, the application will be deemed ineligible and will not be accepted for review. The HRB will contact the Lead Applicant in the event that this situation arises.

Please note that as signatory of the DORA Declaration[7] and the Coalition for Advancing Research Assessment[8] (CoARA), the HRB is committed to supporting a research environment where importance is placed on the intrinsic value and relevance of research and its potential impact in society (HRB – Declaration on Research Assessment).

[7] Home | DORA (sfdora.org)

[8] https://coara.eu/

6.2.2.1 Qualification:

Lead Applicants must possess a PhD degree or demonstrate equivalent research experience as defined in national[9] and international[10] frameworks or policy documents.

1. PhD equivalency is defined as at least four years 'full time' research experience post-primary degree, which does not need to be consecutive. Full-Time Equivalent Research Experience is measured from the date when a researcher obtained the degree entitling them to embark on a doctorate (either in the country in which the degree was obtained or in the country in which the researcher is recruited), even if a doctorate was never started or envisaged.
2. Applications for PhD equivalency **must be submitted at least two weeks before the deadline for applications**. An editable version of the form can be found here. PhD equivalence will not be considered at a later stage, and applicants without confirmed equivalence will be deemed ineligible. Please contact the HRB to discuss equivalency as soon as possible.
3. PhD equivalence cannot be granted to individuals who are at the time of submitting an application, are currently undertaking a PhD or have already completed a PhD.

Note: Active research experience will be considered when assessing eligibility by the HRB and competitiveness of the track record of the Lead Applicants by reviewers. Career breaks, flexible working arrangements, changes in discipline and sector (e.g. industry, health organisation/agency) will be taken into account when assessing the research experience and scientific contribution to knowledge.

6.2.2.2 Career stage

Lead Applicants must have at least four years active post PhD (or equivalent) research experience.

For the purposes of this call the official date of a PhD is defined as the year that the dissertation was successfully defended. Lead Applicants who defended their thesis in 2019 or before are eligible to apply for EIA 2024 unless they have gaps (e.g. career breaks, flexible working arrangements) in their curriculum vitae.

Although there is no upper limit of the number of years researchers are expected to have spent in postdoctoral positions prior to application, this scheme does not target individuals who have already established research independence as explained below. **The Lead Applicant must not** be as yet recognised as an independent investigator by:

1. Having already received an award in Ireland or abroad targeting the career stage of **transitioning towards research independence.**
2. Having already built a research team by securing, as **Lead Applicant**, any peer-reviewed research grant which supports research personnel.
3. Acting as the past or present primary supervisor or sponsor of an early career scholarship or fellowship (e.g. PhD, postdoctoral) awarded to another individual.

[9] https://www.iua.ie/wp-content/uploads/2021/01/Post-Doctoral-Researcher-Level-1-General-Job-Description.pdf

[10] https://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-guide-appl-msca-if-2018-20_en.pdf

4. Being already recognised as an **independent investigator** as confirmed by their Host Institution.
5. Leading an **existing** research team.
6. Being named as the **primary** supervisor previously for a PhD candidate or other early career researchers. However, Lead Applicants may have **some** previous supervisory experience other than as **primary** supervisor.

Lead Applicants for which any or all the above pertain are ineligible to apply to this round of the EIA scheme. Please contact the HRB if you are unsure.

6.2.2.3 Employment status

Lead Applicants **can** be individuals who are currently:

1. Working in Ireland.
2. Working overseas.
3. On a career break.

If employed in the Republic of Ireland, Lead Applicants **must not**

1. Hold a permanent position (academic).
2. Hold a fixed-term position (academic) with a contracted end date equal to or later than two years from the deadline of this call (See Timeframe below). Please note that fixed term postdoctoral or other research-based positions are eligible.

Health and social care practitioners engaged in delivering clinical practice or social care and who wish to advance their research careers as well as remaining active in a healthcare role should apply to the Emerging Clinician Scientist Award 2024 scheme. Please consult with HRB staff if you are not sure which scheme best fits your research career stage.

6.3 Mentors

The Lead Applicant **must nominate two mentors** as part of this application; a **Scientific Mentor and a Host Institution Mentor**.

The **Scientific Mentor** should provide support and guidance to the Lead Applicant during the award for the research project, career milestones and research vision. The Scientific Mentor will also be supporting the lead Applicant in the acquisition of the set of skills necessary for having an effective and active role in actionable knowledge in health research. The selection of a mentor, who can demonstrate expertise in applied research, capacity building and coaching, will be crucial for the successful applicants.

The Scientific Mentor should be an individual who has strong evidence of:

1. Expertise and a skillset in knowledge application and/or translation and/or implementation.
2. Experience in networking, collaborating and ideally influencing clinicians, executives, health care personnel, policy makers and/or other relevant stakeholders.
3. Leadership experience.
4. Experience in conducting research projects and programmes.

5. Track record in scholarly publication and communication (peer-review articles, research data publications, national or international briefing/reports, etc.).
6. Coaching and mentoring.

The Scientific Mentor should not be the current sponsor of the Lead Applicant and should not be based in the same Institution as the Lead Applicant. This is to facilitate:

1. An appropriate balance between the supporting and guiding role of the mentor.

   And

2. The Lead Applicant achieving independence during the award.

If the Scientific Mentor is selected from overseas, the Lead Applicant needs to describe how proper mentorship arrangements will be met.

The Scientific Mentor will need to approve their participation and complete the mentor section in the online application before it is submitted.

The **Host Institution-based Mentor** must be nominated for the purpose of providing supplementary guidance to the Lead Applicant during the award, such as more career-specific or institutionally relevant guidance. This mentor should support the Lead Applicant in navigating the administrative processes of setting up as an independent researcher and has a particularly important role at the start of the award. This mentor must be from the intended Host Institution and may be in the same department as the Lead Applicant and typically is not the current sponsor of the Lead Applicant.

6.4 Co-Applicants

A **Co-Applicant** has a well-defined, critical, and substantial role in the conduct and steering of the proposed research. A Co-Applicant may receive funding for items such as running costs and personnel but will not receive support towards their own salary if they are in salaried positions. However, knowledge user and PPI contributor Co-Applicants can request their own salary, depending on their role and percentage of time dedicated to the research for the duration of the award **(up to a maximum of 5 Co-Applicants can be listed)**.

Each Co-Applicant must confirm their participation and is invited to view the application form online. The terms of any co-application should be determined early, and relevant agreements should be in place by the onset of the project. The HRB advise that consideration should be given to issues such as relative responsibilities, governance arrangements, intellectual property rights, reporting and access to data and samples when working up co-application agreements.

6.5 Collaborators

An official Collaborator is an individual or an organisation who will have an integral and discrete role in the proposed research and is eligible to request funding from the award when properly justified. Named collaborators may include investigators or organisations from outside the Republic of Ireland, but an individual or organisation should **only** be named as Collaborator if they are providing specific contributions (either direct or indirect) to the activities. A collaborator may provide training, supply samples or kits, provide access to specific equipment, specialist staff time, staff placements, access to data and/or patients, instruments or protocols, industry know-how, or may act in an advisory capacity. Collaborators can come from a range of backgrounds such as academia, the private sector,

a healthcare organisation, the charity sector, or a patient group **(up to a maximum of 10 Collaborators can be listed)**.

At the full application stage, profile details **must** be provided for ALL official collaborators. In addition, each official collaborator **must** complete a **Collaboration Agreement Form**, which must be submitted as part of the full application form. A template collaboration agreement form can be downloaded from the collaborator section of the online application form at full application stage.

If access to samples, vulnerable population groups, healthy volunteers or patients, data, databases, or a link to an existing national or international study (e.g., an existing cohort or longitudinal study) are an integral part of the proposed project, evidence of commitment and access to data, participants or other information must be demonstrated by having the Data Controller[11] and/or key Gatekeeper/s for the study included as a Collaborator/s.

At full application stage the Lead Applicant will be asked to describe any relevant agreements that they have entered into to facilitate their partnership working. The terms of any collaboration should be determined early, and relevant agreements should be in place by the onset of the project. The HRB advise that consideration should be given to issues such as relative responsibilities, governance arrangements, ownership and copyright, access and sharing of data and samples etc. when working up Partnership proposals.

6.6 Funded personnel

Lead Applicants must demonstrate that the level, expertise, and experience of proposed research personnel matches the ambition and scale of the project and that they possess the necessary breadth and skills in all methodological areas required to deliver the proposed programme of work. Alignment between personnel requested and the proposed project should be demonstrated. Roles and responsibilities of funded personnel must be differentiated and clear. Reviewers will thoroughly assess the level of baseline experience matched with the supervisory and up-skilling arrangements proposed in scoring the proposal.

This scheme is not framed as a training initiative for PhD candidates. Where candidates for a higher degree are proposed to work on projects, Lead Applicants must carefully consider:

1. The complexity, scale, objectives and dependencies of the project.
2. The suitability of such project in terms of delivering a clearly identifiable original research project or the potential difficulties in clustering various pieces of work packages for a PhD thesis. The skills, expertise and experience level required to carry it out.
3. The risks and challenges of having PhD candidate(s) in the team considering potential changes in the Lead Applicant position/contract and/or other changes (e.g. Host institution) during the award.

[11] A **'controller'** refers to a person, company, or other body that decides how and why a data subject's personal data are processed. If two or more persons or entities decide how and why personal data are processed, they may be 'joint controllers', and they would both share responsibility for the data processing obligations. Data Controllers from the provider organisation should be named as Collaborators unless the dataset is publicly accessible, or the Central Statistics Office has given a letter of comfort.

4. Any requirements and/or restriction relating to their registration with the Host Institution, and this should be accounted for when determining the start date of the award.

If proposing a PhD candidate, please note the following:

1. The Lead Applicant should clearly put in place appropriate supervisory arrangements with a supervisory team in place, which may also include the Lead Applicant's mentor and /or Co-Applicant(s), if appropriate.
2. The Lead Applicant, with input from the Host Institution and set out in the Host Institution's letter of support at full application, should have a mitigation strategy to ensure proper the responsibilities for the training, development of the PhD candidate and successful completion of the PhD thesis are fulfilled.
3. Lead Applicants must budget for four years funding for PhD candidates.
4. PhD candidates should be enrolled in a structured PhD programme, at the Institution where they will be registered or through the SPHeRE PhD programme[12], which is Ireland's national research training programme for Population Health, Policy, and Health Services Research.

7 Training and Professional Development

The Emerging Investigator Awards are career development research awards and are more than a means to fund a research project. A combination of the proposed research project and a good training and professional development plan in a strong research training and mentorship environment will provide the Lead Applicant with the most valuable experience during the award. It is also strongly recommended to discuss the training plan with the mentors.

The training and professional development activities should clearly support the Lead Applicant in

1. Conducting the proposed research project and furthering their research vision.
2. Developing a team.
3. Supporting their trajectory to becoming independent investigators and future health and social care leaders.
4. Facilitating the application and/or translation of knowledge generated through research and collaborations towards improving the health care systems, policies, or practice.

7.1 Training and Professional Development Plan

Applicants are required to provide a detailed personal research and professional development plan. This plan should include:

1. Formal and informal career development training.
2. Research skills/techniques training specific to the project.

[12] https://www.sphereprogramme.ie/ For further information please contact Katherine Walsh katherinewalsh@rcsi.ie

3. Generic research skills training, such as data handling/protection, good oral and written communication/presentation, IT, and time-and resource-management.
4. Methodological/experimental design.
5. Statistics.
6. Dissemination and knowledge sharing and open resources.
7. Consideration of intellectual property issues.
8. GDPR and ethical issues.

Note: Applications which do not contain a convincing training and development plan are unlikely to be competitive.

8 Host Institution

A HRB Host Institution is a research-performing organisation that is approved by the HRB for the purpose of receiving and administering HRB grant funding and is responsible for compliance with all general and specific terms and conditions of awards. HRB Host Institution status is a requirement to submit an application under all HRB award schemes. In order to be eligible to apply for funding, an Institution must be an **approved** HRB Host Institution no later than two calendar months before the closing date of a call. A list of currently approved HRB Host Institutions and information on the application process for research performing organisations to be approved as HRB Host Institutions can be found on the HRB website[13].

Please note that this call **is not** open to Host Institutions from Northern Ireland.

Considering the objectives of this scheme, the substantial investment on talented individuals and future leaders in health research in Ireland, **the HRB has a strong expectation** that a **Host Institution**, in line with their policy and procedures for recruitment, will commit to sustainable plans to support a successful individual beyond the duration of this award with a **faculty appointment or, in the interim, with any other means of support until such a position becomes available.**

The Host Institution is required to provide Letters of Support at:

1. **Pre-application stage** which confirms that the applicant is not recognised as an independent researcher by the Host Institution.
2. **Full application stage** which clearly describes how the host institution will support the Lead Applicant for the duration of the HRB award. This letter should state the following:
    a) That the Host Institution will recognise the successful Lead Applicant upon receipt of the award as an independent investigator, who will have an independent office, research space at the institution for which they will be fully responsible for at least the duration of the award. This Letter of Support should confirm whether **both** the office **and/or** research space referred to above will be for the **exclusive** use of the Lead Applicant.

[13] http://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/hrb-policy-on-approval-of-host-institutions/

b) The status and role-title of the Lead Applicant upon receipt of the award, e.g. Lecturer, Assistant/Associate Professor etc.

c) That the Host Institution will sustain and support the successful Lead Applicant for the duration of the award by providing other supports, such as access to infrastructure, mentoring and in-house training (e.g. leadership) and networking activities etc.

d) That in the instance where **PhD candidate(s)** are proposed during the award, the HI will confirm that proper arrangements and mitigation strategy are in place to support the PhD candidate(s) during their higher degree to successful completion.

Please note that all commitments made to the applicant in the Letters of Support are expected to be complied with in full should the proposal be successful, and the Host Institution will be required to report on how this is implemented or will be achieved in the annual reports and at Interim Review. The HRB may follow up with the Host Institution to ensure delivery of commitments made.

The letters of support should be on headed notepaper, dated and signed by the Dean of Research or equivalent.

Electronic signatures are acceptable for letters that are uploaded on the HRB GEMS system.

It is the responsibility of the Lead Applicant to ensure that applications are completed in full, and all necessary documentation is received by the HRB on, or before, the closing dates indicated.

9 Application, Review Process, and Assessment Criteria

9.1 Grant E-Management System (GEMS)

Applications must be completed and submitted through the HRB online Grant E-Management System (GEMS) (https://grants.hrb.ie).

The application must have been reviewed and approved by the signatory approver at the research office (or equivalent) in the Host Institution before it is submitted to the HRB. Therefore, applicants should ensure that they give the signatory approver sufficient time before the scheme closing date to review the application and approve it on GEMS. Please note that many host institutions specify internal deadlines for this procedure.

The HRB is committed to an open and competitive process underpinned by international peer review. To ensure the integrity of the assessment process, conflict of interest and confidentiality are applied rigorously in each stage of the process.

9.2 Review process

The Emerging Investigator Awards for Health 2024 will use a two-stage application process consisting of:

1. Open call for Pre-applications (Stage 1).
2. Invitation of selected applicants to submit a Full Application (Stage 2).

9.2.1 Stage 1 - Pre-application

The pre-application form will focus on:

1. The track record of the **Lead Applicant** to date.
2. An outline of the **research project** focussing on the relevance of the proposed project and the potential for actionable knowledge.
3. The details of the **Core Research Team** (mentors and Co-Applicants)**.**

Pre-applications will be checked for eligibility, other than scope and will be sent to a specially convened international review panel for assessment. The panel will assess if applications are in scope. Members of the review panel are selected based on the range of disciplines, methodologies, and expertise appropriate to the scheme. Panel members are assigned as lead, secondary and tertiary reviewers to specific applications.

The pre-application review panel will discuss the eligible pre-applications based on the assessment criteria below and a final score is collectively agreed for each application and then they will be ranked according to score.

The panel will recommend that a selected number of Lead Applicants are invited to full application stage. Written panel reviews and a brief feedback document from the panel discussion will be provided to all applicants.

9.2.1.1 Stage 1 Assessment criteria

The following are pre-application review panel assessment criteria:

1. **The Lead Applicant** (40%)**:** Potential of the Lead Applicant to become an independent investigator.
2. **The Research Project** (30%): Relevance of the research question and the potential contribution made by the proposal.
3. **The Support** (30%)**:** Fit of the research team with the research question and with the objective to generate research findings informed by, or informing, policy and practice.

The final score is the calculated weighted average of the three sub-scores.

In the event that there are two or more proposals with the same final score around the shortlisting cut-off within the ranked list, the sub-score awarded to the Applicant will be the **first** determining ranking factor. Where the Applicant sub-score is also the same, the balance between the **research disciplines** of the Lead Applicants will be the **second ranking factor** to prioritise proposals for shortlisting. This means the under-represented discipline within the ranked list will be prioritised. In line with the **HRB Gender Policy, the gender balance** of Lead Applicants within the ranked list recommended for shortlisting will be the **third ranking factor**.

9.2.2 Stage 2 - Full application - by invitation only

Information provided in the HRB online Grant E-Management System (GEMS) (https://grants.hrb.ie) at pre-application stage will feed automatically into the invited full application forms.

Please note that the panel will have made their selection based on the information provided at pre-application stage. The Lead Applicant will have the opportunity to make small revisions from pre-

application to full application stage (e.g. addition of expertise/partner, revision of targeted profession/disciplines for training, strengthening the stakeholder participation, etc.), especially if addressing the feedback after the pre-application panel review. However, full applications should reflect a development of the relevant pre-applications rather than a radically different approach.

Full applications, once submitted, will undergo a **two-step** assessment process as follows:

9.2.2.1 Phase 1 - International peer review and public review

For each invited full application, the HRB aims to receive written feedback from at least three international peer reviewers and two public reviewers.

International peer reviewers play a vital role for the HRB in setting standards and in benchmarking our scientific community to enable them to operate in a global context. Peer reviewers will focus on the stated assessment criteria for the call and will provide comments as well as a score which is visible to the HRB and to panel members.

Public reviewers will only assess the quality of PPI in the proposal and will provide comments and an overall rating which will be shared with the panel. Public reviewers will not provide a score.

Public Reviewers are asked to comment on the following:

1. The Plain English Summary (Lay Summary).
2. Relevance of the Proposed Research Question.
3. Public and Patient Involvement in development of and throughout the project.
4. Research Design - inclusion of research participants (where applicable).
5. Dissemination and Potential Impact of the Proposed Work.

Both peer and public review comments will not include any reference to the reviewer's identity or their submitted scores or rating.

The HRB will share the public review feedback with the PPI Ignite Network team in the Host Institution where applicable.

Applicant response: The Lead applicant and research team will be provided with a time-limited opportunity to respond to peer and public review comments (Timeframe below).

The peer review and public review comments will be made available to the Lead Applicant on their GEMS personal page. The Lead Applicant will have 10 working days only to submit their response through GEMS, and the response has a **maximum word count of 2000 words only for the peer review response** (including references) and **500 words only for the public review response**. No figures can be uploaded. The response will be provided to members of the interview panel, in advance of the interview panel meeting, along with the application, the peer and public review comments and rating.

9.2.2.2 Phase 2 - Interviews with international panel

An international grant selection panel will be convened, and members are assigned as lead and secondary reviewers to specific applications. It is envisaged that some pre-application panel members will be invited to the full application panel. Panel members are selected based on the

range of applications received and the expertise and skillset needed (e.g., research area and methodological and analytical approaches, coaching and mentoring, knowledge translation/applied health research, etc.).

All Lead Applicants invited to submit a Full Application will be invited to attend an interview.

Panel members have access to the application, peer and public reviews and the applicants' response prior to the interview panel meeting. HRB staff members are present at the interview meeting to clarify any procedural aspects for the Chair or panel members and to take notes for the feedback process.

The panel will review the strengths and weaknesses of the application relating to the review criteria detailed below. Successful applicants are expected to score well in all review criteria. While PPI is not a stand-alone assessment criterion, it may influence scores under any criterion as relevant to the application.

At the end of the interview panel meeting, a final score is collectively agreed for each application, which will then be ranked according to score. To prioritise between applications with the same score around the funding cut-off in the panel ranking list, the sub-score awarded to the **Applicant assessment criterion** will be the **first ranking factor**. Where the Applicant sub-score is also the same, the balance between the **research disciplines of the Lead Applicant will be** the **second ranking factor** to prioritise applications. This means the under-represented discipline within the ranked list will be prioritised. In line with the **HRB Gender Policy**, **the gender balance** of Lead Applicants within the ranked list recommended for funding will be the **third ranking factor**.

The recommendations of the interview panel will be presented for approval at the next scheduled HRB Board meeting. When the Board of the HRB has approved the process and recommendations, HRB staff will contact the Lead Applicants and Host Institutions to notify them of the outcome. A summary of panel members' comments and the panel discussion comments will be issued to the Lead Applicant following Board approval.

9.2.2.3 Stage 2 - Assessment criteria

The following assessment criteria will be used to assess applications **by peer-reviewers and the interview panel reviewers**. Successful applications will be expected to **rate highly in all criteria**.

1. **The Lead Applicant (40%):**
    a) Potential of the Lead Applicant to become an independent investigator as evidenced by their track record and research vision.
    b) Quality and appropriateness of the training and development activities supporting the Lead Applicant's progression stage.
2. **The research Project (30%):**
    a) Relevance of the research question and potential for actionable knowledge.
    b) Appropriate research design and methodology to address the research question.
3. **The support (30%):**
    a) Fit of the research team with the research question and the expertise required to facilitate actionable knowledge.

b) The suitability of the Mentors.

c) Host institution support during and beyond the award.

Panel members will be advised to take PPI approaches into consideration under any of the assessment criteria if considered relevant.

9.3 HRB Career track CV

As signatory of the DORA declaration, the HRB is committed to supporting a research environment where importance is placed on the intrinsic value and relevance of research and its potential impact in society. The HRB is using a narrative-like CV, the HRB Career Track CV, for research career schemes, where the person is at the core. In the Emerging Clinician Scientist Awards the HRB CV is mandatory for Lead Applicants, Co-leads, and Scientific Mentor, where applicable. It aims to allow researchers to craft a convincing rationale and present their career paths in a much more comprehensible way. Such a CV should be tailored to individuals completing it and to the funding opportunity they are applying for.

Please note that the HRB will be surveying Lead Applicants and Scientific Mentors following the submission of the pre-application to explore the users' experience. The HRB will also survey the reviewers to this scheme. Responding to this survey will not be mandatory. The objectives are to understand:

- The acceptance and usability of the CV among the users.
- Effectiveness of the guidance provided to users.
- How this approach is affecting the way research is assessed and funding is awarded.

Please see additional information here.

10 Timeframe

Date	
	Pre-application Stage
07 September 2023	Call Opening for Pre-application stage
09 November 2023	Deadline for Pre-application submissions
Mid-January 2024	Pre-applications panel meeting
Mid-January 2024	Applicants notified of shortlisting outcome and invitation to full application stage of shortlisted applicants
	Full application Stage
Mid-January 2024	Full application stage opens
Mid-March 2024	Submission of full applications closes
Mid-June 2024	End of peer and public review
Late June 2024	End of the Applicant Response phase and start of panel review stage
Late August 2024	Interview panel meeting
Late September 2024	Board approval
Oct-Nov 2024	Pre-contracting and contracting

01 December 2024	Earliest start date for awards

11 Contact for pre-application stage

For further information on the **Emerging Investigator Awards for Health 2024** please contact:

Dr Brian Nolan

Project officer

Research Strategy and Funding

Health Research Board

E. **EIA@hrb.ie**

The HRB reserves the right to reject any application that does not meet the terms of this call.

The HRB's procedure for appealing funding decisions is available at https://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/hrb-policy-on-appeals/.

Appendix I: Detailed Guidance on the EIA Pre-application Form

Only registered users of the GEMS system can apply for grants. To submit an online application to the HRB, applicants are required to register at the following address: *https://grants.hrb.ie*

Please refer to the GEMS Technical Guidance Notes, available on the left-hand column of your GEMS profile homepage, for further information.

The Lead Applicant must create the application, and it can then be jointly completed with named Co-Applicants.

- Lead Applicants can register on GEMS and they will receive an email to confirm their registration and log in details. The Lead Applicant can then add information on their contact and CV details in the 'Manage My Details' section of their GEMS account.
- Lead Applicants previously registered on GEMS can login to their GEMS account and update any information regarding their basic CV details in the 'Manage my details' section.

Once logged in to GEMS applicants are taken directly to the Home Page which is the starting point to create a new Grant Application.

The Applicant will be asked to complete a check list of mandatory questions. In order to access the application form, the Lead Applicant must satisfy the conditions of this check list.

Lead Applicant Eligibility	
I have read the Guidance Notes for the EIA 2024 call and reviewed the main changes applied to the EIA 2024.	☑
I am clear about the role of the authorised signatory in the nominated HI, and I am aware that I need to build sufficient time into the application process for the HI to access, review and approve my final application for submission to the HRB through the GEMS system.	☑
I confirm that I have a PhD, or equivalency already approved by the HRB, in line with EIA 2024 Guidance (6.2.2.1 Qualification).	☑
I confirm that I have a minimum of four years active postdoctoral experience prior to the submission of an application (Please see 6.2.2.2 Career Stage of the EIA 2024 Guidance for further information.)	☑
I confirm that I have not acted in the past nor am I acting as the present as primary supervisor or sponsor of an early career scholarship or fellowship (e.g. PhD, postdoctoral researcher) awarded to another individual.	☑
I confirm that I am not as yet recognised as an independent investigator by having already built a research team or by leading a research programme in my own right.	☑
I confirm that I am not already recognised as an independent investigator by a Host Institution.	☑
I confirm that I have not secured, as Lead Applicant, any peer-reviewed research grant that supports research personnel.	☑

I confirm that I have not already received an award in Ireland or abroad targeting the career stage of transitioning towards research independence.	☑
I confirm that I do not hold a permanent position (academic or other) or a fixed-term position (academic or other) with a contracted end date equal to or later than two years from the deadline of this call (14 September 2023).	☑
I confirm that I am not applying to ECSA 2024.	☑
Application Scope Eligibility	
I confirm this application falls within the scope of Patient Oriented Research, (POR), Population Health Research (PHR), or Health Services Research (HSR) as outlined in Section 4 Scope and Appendix II of the EIA 2024 Guidance.	☑
I confirm the application does not include any items listed as not funded by this scheme in Section 4 Scope – This scheme will not fund: of the EIA 2024 Guidance.	☑

The Lead Applicant will be then able to select the Host Institution and Notify the Authorised Signatory before starting the application. Further details for completing each of the main sections of the application are provided below.

Host Institution

For the purposes of contracting, payment, and management of the award, HRB funds can only be awarded to HRB approved Host Institutions. Please note this call **is not** open for Host Institutions from Northern Ireland. The Host Institution for the award is normally that of the **Lead Applicant**, but it may be another organisation/institution designated by the research team, where it is clearly justified. In GEMS you will be asked to identify a Host Institution (from this list) and type it in full (do not use acronyms such as UCD, TCD, NUIG). Once you have entered the first 3-4 characters of the Host Institution, you will be assisted with auto-select options. It is important that the Host Institution name is entered accurately and in full as an incorrect entry may result in delays in attaining Host Institution approvals.

If you wish to propose a Host Institution which is not on the HRB list, you are advised to contact the HRB at gemshelp@hrb.ie.

Note: In order to be eligible to apply for funding, an Institution must have been approved as a HRB Host Institution no later than two calendar months before the closing date of a call, only pre-approved Host Institutions will appear in this list.

Signatory Notification (within Host Institution)

Once the Host Institution is selected at the initial stages of application creation this will allow the Lead Applicant to notify the authorised signatory (Dean of Research or equivalent person authorised to endorse research grant applications for the Host Institution) in that Host Institution of the Lead Applicant's intention to submit an application to the EIA 2024 scheme. The signatory's details are pre-populated in the system so the applicant just needs to click 'NOTIFY' within GEMS. We recommend that **you notify the HI signatory** of your intention to apply for the full application as soon as possible in the application process. The signatory will receive an email from GEMS with the name and email details of the Lead Applicant and if they have any queries or clarifications, they can

engage directly with the applicant to resolve them. The Host Institution signatory must confirm their willingness to participate as Host Institution for the application through GEMS and once they do this a PDF of the application will be available for them to review with a view to them ultimately approving the final version of the proposal for submission to the HRB.

1 Project Details

1.1 Project title

You are asked to provide a title that clearly describes the research to which this application is related. This should be descriptive and concise and should reflect the aim of the project. There is a **200-character** maximum limit.

1.2 Project start date

Please indicate the proposed start date. The earliest start date is **01 December 2024**.

1.3 Part-time arrangements

Please note that Lead Applicants are expected to commit 1.0 FTE to the award. However, in line with the vision statement and commitment for Equality, Diversity, and Inclusion (EDI)[14], part time arrangements may be proposed because of personal circumstances. Lead Applicants will need to demonstrate that they can meet the aims and objectives of the EIA scheme with part-time arrangements.

1.3.1 Do you intend to conduct the award part-time if successful?

Y/N

1.3.1.1 FTE

Please confirm the full time equivalent (FTE) you propose to spend on this award (please note a **minimum 0.5 FTE** research protected time is required).

1.3.1.2 Proposed part-time arrangements

Please detail the proposed arrangement (e.g. number of days per week) with time to be dedicated to the research project.

Clearly describe how you will fulfil the main objectives of this scheme with the proposed part-time arrangement, either integrated with other academic activities or due to personal circumstances. Please note that block periods dedicated to research are not allowed. The word limit is **150 words**.

[14] Our Public Service 2020 - Promote Equality, Diversity and Inclusion Mission Statement (pdf)

1.4 Project lay summary

This lay summary is similar to the Project Abstract in that you are asked to describe what you propose to do, why you think it is important and how you are going to go about conducting, analysing and drawing conclusions from the research. The difference is that it needs to be written as a plain English summary such that it is clear, easy to understand, and is easily accessible to a lay audience. It should not be copied and pasted from elsewhere in the application. The lay summary may be used when providing information to the public with regards to the variety of research funded by the HRB and may be posted on the HRB website. A well-written lay summary will enable peer reviewers and Panel members to have a better understanding of your research application. The word limit is **300 words**.

1.5 Project Abstract

This should be a succinct summary of the proposed research. This structured summary should clearly outline the background to the research, the aims, and hypotheses of the project. The objectives of the project and what the work is expected to establish should be described. It provides a clear synopsis of your application and should set the research application in context. The word limit is **300 words**.

1.6 Keywords

Please enter up to **five keywords** that specifically describe your research project.

2 Personal Declaration

Please briefly describe why you are well-suited to the role of emerging investigator with an active role in translating knowledge generated through research into the health care system, policies, or practice. Describe your long-term research vision and career objectives and how this award will contribute to their attainment. The word limit is **200 words**.

3 Lead Applicant's Details

3.1 GEMS Profile Details – Basic CV information

Details are requested about the Lead Applicant including their position, status, and their supervisory experience.

The Lead Applicant's CV details (Name, ORCID, institution, profession, education, and employment history) are managed under the "Manage my Details" section of your GEMS account.

ORCID: The HRB is an ORCID member. Lead applicants are encouraged to include an ORCID iD by updating their GEMS profile under 'Manage my Details' and this will feed automatically into the application form. You have also the option to import your publication record from ORCID iD in addition to PubMed. Please note this is not a mandatory field for submitting your application. For more information and to register please see https://orcid.org/.

Please note you **do not** need to complete or update your publications or funding record under 'Manage my Details' as they will not feed through to this application and you will be asked to enter them manually in the section below.

3.1.1 Gender

Please select

- Man.
- Woman.
- Other gender identity.
- Prefer to not disclose.

This question is included with the application form in light of the **HRB Gender Policy**. The HRB has the responsibility to support both women and men to realise their full potential, to ensure equality of opportunity, and to maximise the quantity and the quality of research. The information will not be shared with reviewers, and it is for HRB internal use only.

3.2 Breaks from research

In this section you may want to mention breaks from research, such as statutory leave, secondments, flexible work arrangements or other relevant changes (e.g. sector or discipline) that may have affected or influenced your progression as researcher. These periods will be taken into account to assess the overall active research experience for eligibility and assessment purposes. Please state the period and the reason. The word limit is **150 words**.

3.3 Key contributions

The aim of this section of the CV is to highlight key contributions that provide relevant context for reviewers and panel members. There are four different categories of contributions, and you should aim to cover as many as possible.

The activities under each category will be assessed in the context of your career stage and against the objectives of the scheme.

3.3.1 Contribution to the generation of knowledge

This section focuses on how you have contributed to the generation of knowledge, new ideas and hypotheses, and tools. This encompasses how you have communicated your ideas and research results (written and verbally), as well as funding and awards that you have received.

1. List up to five research outputs that are most relevant to this application and include one reference per output, if applicable. For each output provide a short outline of the stated output, your specific role, the significance to and influence on the research field and/or discipline and/or to health policy and/or clinical practice and resulting impact, if any. The word limit is **400 words**.
2. Provide a short statement of your overall contribution to the research field and/or discipline and/or policy and/or practice. The limit is **100 words**.

3. Reference up to five independently peer-reviewed research funding awards (including those received from the HRB) most relevant to this application and please specify your role on each: Principal Investigator, Co-Principal Investigator (Co-Lead), Co-Applicant or Collaborator.

Research outputs: They can include datasets, software, publications, commercial or entrepreneurial or industrial products, educational products, clinical practice developments, policy publications, and other similar items. If an output has a DOI please only include this. Research outputs should be examples of rigorous science following high standards, that are reproducible, and others can build upon. Please indicate to what extent these outputs have been made openly available (providing evidence) to the research community and to potential users of research outputs.

Metrics: Please **do not** include information related to H-indexes, impact factors, or any type of metric that refers to the journal, publisher, or publication platform. The scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published. If you wish to reference publication citations, please note they should only be used to complement the narrative component of the CV and not in isolation.

3.3.2 Contribution to training and development of others

This section highlights your expertise which was critical to the success of other individuals either within your team, other teams and supervision and mentoring.

Please provide any examples under selected headings as most relevant to your career and experience to date. These may be team support, supervision and/or mentoring activities, teaching activities, workshops or summer schools' involvement or support you provided to the advancement of colleagues (junior or senior) or strategic leadership by directing a team. The word limit is **200 words**.

Note: this is a standard section in the Career Track CV and it will be assessed in line with the career stage targeted in a funding scheme.

The supervision as primary supervisor of research staff will render you as ineligible for EIA 2024.

3.3.3 Contribution to wider research community

This section emphasises the engagement to progressing the local and international research community. This may include:

1. Commitments including editing, reviewing, refereeing, committee/panel work and your contribution to the evaluation of researchers and research projects.
2. Contributions to increasing research integrity, and improving research culture (equality, diversity, mobility of researchers, and reward/recognition of researchers' broad range of activities, open science initiatives).
3. Appointments to positions of responsibility such as committee membership and corporate roles within your department, institution or organisation, and recognition by invitation within your sector.
4. Establishment of local/national/international collaborations, partnerships, and networks (including interdisciplinary and cross settings).
5. Strategic leadership by directing an organisation, company, or institution.

Please this list is not exhaustive.

Please provide some examples in bullet points under selected headings as most relevant to your career and experience to date. Please note that it is not expected you have experience under each suggested subheading. The word limit is **200 words**.

3.3.4 Contribution to broader society

This section emphasises societal engagement and knowledge exchange.

It may include:

1. Working with policymakers and knowledge users.
2. Public, patient and carer involvement in research (PPI), and collaborating with particular societal groups.
3. Science outreach activities for the general public or subsection of the general public
4. Engagement with industry and the private sector.

Please note this list is not exhaustive.

Please provide some examples in bullet points under selected headings as most relevant to your career and experience to date. The word limit is **200 words**.

3.4 Additional proof of eligibility

1. Please state your current position, type (e.g. fixed term, permanent) and end-date of the contract you currently hold.
2. Please enter the date you defended your PhD thesis. If you do not have a PhD but you have been granted PhD equivalency by the HRB, please add 'PhD equivalency approved' and state the date by which you have acquired the 48 months of research time at 1.0 FTE as assessed by the HRB. This date will facilitate the calculation of the minimum of four years active post PhD research experience required as one of the eligibility criteria (see 6.2.2.2 Career Stage). Please note this **is not** the date the HRB approved the PhD equivalence.
3. Please confirm whether you have secured any funding as a Lead Applicant that supports or has supported research staff. If yes, please list all funding awards you have received as Lead Applicant, additional those (if any) listed in section 3.3.1 list all staff members and roles supported by these awards.

4 Research Project Description

Please ensure that your application is focused, and that sufficient evidence is provided to enable the international peer reviewers and grant selection panel members to reach a considered judgement as to the quality of your research application, its potential health impact, and its feasibility.

The Project Description must include:

- Research Question.
- Current Knowledge, Background to the Area, Relevance and Knowledge Gap.

- Overall Aim.
- Research Design and Methodological Approach.
- Details for applications that include a 'pre-clinical' study.
- Impact Statement/ Pathway to actionable Knowledge.
- Public and Patient Involvement (PPI) in the Research Project.
- Potential Safety Risks and Ethical Concerns
- References.

4.1 Research question

Please clearly state the research question behind the proposed work. The word limit is **50 words**.

4.2 Current Knowledge, Background to the Area, Relevance and Knowledge Gap

Describe the background to the research application and detail the size and nature of the issue to be addressed. **We expect that evidence supporting the case for the project has been gathered systematically**, i.e. as systematic reviews or other evidence synthesis formats. Simple literature overviews are not sufficient. Evidence synthesised systematically should include evidence of

1. A systematic identification of previous work.
2. Critical appraisal.
3. Synthesis of the evidence.

   and

4. Interpretation of findings.

Where available, include a description of any pilot work, professional and consumer consensus studies already undertaken.

Please reference any documented need for this area of research, including information on burden on health or the healthcare system. Have any potential users of research outputs been involved in identifying the research question (e.g., patients, healthcare professionals, policymakers)? Explain why this research is both important and timely. Show how your research will add to the knowledge base/advance the state of the art in this area. Be aware that the peer reviewers reading your application are based outside of Ireland, so it is important to describe the healthcare delivery context in Ireland when discussing issues around need (including specific needs of any under-represented groups), relevance, timeliness, and feasibility. The word limit is **1200 words**.

NOTE: you are strongly advised to read the Guidance Notes and in particular the assessment criteria when writing this section.

4.3 Overall Aim

Please state the overall aim of the research project. The word limit is **100 words.**

4.4 Brief Overview of the Research Design and Methodological Approach

Please **briefly** describe your main methodological approach to address the research question. The word limit is **500 words**.
Further detail will be required at full application stage.

4.5 Details for applications that include a 'pre-clinical' study

For applications which contain one or more elements of a 'pre-clinical' study, in addition to details given in Section 4.4 (Research Design and Methodological Approach) as to number of animals used and how this was determined, applicants must provide **further information** as follows:

Provide appropriate evidence with regard to the relevance of the proposed animal species or model compared with humans (e.g., target expression distribution and primary structure; pharmacodynamics; metabolism and other pharmacokinetic aspects; or cross reactivity studies using human and animal)

and

Justify and document in detail the choice of species/model relative to the pathology and/or human condition (aetiology, pathophysiology, symptomatology, and response to therapeutic intervention)[15] [16]

and

Describe how the proposed pre-clinical work correlates and aligns with any planned future stages of the research in humans even if not part of this application.

If your project involves the use of animals, provide sound scientific justification for their use, explain why there are no realistic alternatives, and demonstrate that the numbers proposed will allows meaningful results to be obtained from the research.

Useful links including to the EU Reference Laboratory for alternatives to animal testing and the PREPARE guidelines (developed to promote animal alternatives, reduce waste and increase the reproducibility of research and testing) are referenced in Appendix IV.

Give details of the proposed sex of the animals, and rationale for the numbers of each sex[17][18]. Experiments should use the smallest possible number of animals required to answer the research question and should ensure that distress and suffering are avoided wherever possible. Applicants are strongly advised to consult with their animal care team in their HI when planning animal studies. Links to an online tool created to aid researchers including incorporating sex into study design and the ARRIVE checklist can be found in Appendix IV.

[15] https://www.fda.gov/media/88625/download

[16] https://www.ema.europa.eu/en/documents/scientific-guideline/guideline-strategies-identify-mitigate-risks-first-human-early-clinical-trials-investigational_en.pdf

[17] https://science.sciencemag.org/content/364/6443/825/tab-figures-data

[18] Female rodents are not more variable than male rodents: A meta-analysis of preclinical studies of fear and anxiety - PubMed (nih.gov)

Note: Experiments should use the smallest possible number of animals required to answer the research question and should ensure that distress and suffering are avoided wherever possible. See the Science Europe Report on "Improving Science Quality through the Replacement, Reduction and Refinement of Animals in Biomedical Research and Development" for a recent discussion[19]. Links to an online tool created to aid researchers in experimental design of studies involving animals can be found in Appendix IV, in addition to links to recently updated Guidance and checklists for animal studies from 3Rs. The appendix also gives details of registers for systematic reviews involving animal studies.

Note: In some pre-clinical studies where, due to the species-specific nature of the clinical product (e.g., some vector-expressed human transgenes or human derived cellular products) testing in animals would not prove informative or appropriate, alternative *in vitro* pre-clinical models may be proposed, but **detailed justification** must be provided.

Note: Where no relevant species exists, the use of homologous proteins or the use of relevant transgenic animals expressing the human target may be the only choice but, in every instance, a detailed justification of the pre-clinical model must be provided.

The word limit is **200 words.**

Further detail will be required at full application stage.

4.6 Impact Statement - outline

Please outline the likely potential of the research findings from this project to be applied into policy and practice – at local and/or national and/or international context – and articulate the pathway to achieve this.

This statement should be specific and provide information that the external reviewers will find helpful in assessing the potential impact of the proposed research. Impact statements should be written primarily in plain English. The word limit is **200 words**.

Further detail will be required at full application stage.

4.7 Public and Patient Involvement (PPI) in the Research Project - Outline

The HRB recognises that the nature and extent of meaningful public involvement is likely to vary depending on the context of each study. Please note PPI does **not** include the recruitment of study participants in research projects, this is participation of the public rather than involvement. It also does **not** include work aimed at raising awareness of the public around research, such as media publications of research findings, and outreach activities such as open days in research facilities.

Useful resources including practical examples of involving members of the public in your research can be found in Appendix IV. Please be aware there are PPI Ignite network offices in some host institutions.

Further detail will be required at full application stage.

[19] https://www.scienceeurope.org/our-resources/improving-science-quality-through-the-replacement-reduction-and-refinement-of-animals-in-biomedical-research-and-development/

Are you including public involvement in your application?

If Yes,

Please briefly describe all PPI at each stage of the research cycle:

- Identifying and prioritising the research question
- Design
- Conduct
- Analysis
- Oversight
- Dissemination

For each stage, please include the purpose of this involvement and where applicable how PPI has influenced/changed what work has been planned.

This section should be a succinct summary of public involvement activities. Provide information on the individuals/groups and the ways in which they will be involved. PPI contributors should be representative of the relevant people and communities impacted by the research topic.

Please ensure to provide more detail in other sections as appropriate.

Important: The PPI section needs to be written as a plain English summary such that it is clear, easy to understand, and is easily accessible to a lay audience.

If No,

Please explain why PPI is not relevant to your project.

The word limit is **200 words**.

4.8 Potential Safety Risks and Ethical Concerns

Please briefly outline any potential risk and/or harm to patients or human subjects/participants in the research, if relevant. Please highlight any potential ethical concerns (including work involving animals) during this study and/or at follow-up stage. Describe any potential ethical concerns that may arise as a result of this research, even if not part of this application, and how you propose to deal with them. If the proposed research includes vulnerable groups, what additional considerations are there for these participants? The word limit is **200 words**.

Further detail will be required at full application stage.

4.9 References

A full description of the Publications cited in the Project Description should be provided. You can enter a maximum of **15 publications**. Please enter references in the same format.

At full application stage the maximum number of references will be increased to 30 publications

For publications:

Gallagher PA, Shoemaker JA, Wei X, Brockhoff-Schwegel CA, Creed JT. Extraction and detection of arsenicals in seaweed via accelerated solvent extraction with ion chromatographic separation and ICP-MS detection. Fresenius J Anal. Chem. 2001 Jan 1;369(1):71-80. PMID: 11210234.

For book and printed source citations:

Farrell M, Gerada C and Marsden J (2000) *External review of drug services for the Eastern Health Board*. London: National Addiction Centre.

For data citations:

Authors, year, article title, journal, publisher, DOI

Author(s), year, dataset title, data repository or archive, version, global persistence identifier

5 Details of Core Research Team – Mentors and Co-Applicants

5.1 Collaborative and Team-based Approach - outline

Provide an outline of why you have selected the core research team members, the overall complementarity of skills, expertise and disciplines within the team. Please also clearly describe how the team will support you during the transition towards research independence and to develop as a collaborative researcher, who can facilitate actionable knowledge, and develop as future leader. The word limit is **200 words**.

5.2 Mentors

The Lead Applicant must nominate two mentors as part of this application; a **Scientific Mentor** and a **Host Institution Mentor**.

5.2.1 The Scientific Mentor

The Lead Applicant should add the Scientific Mentor to an application by entering the name on GEMS. If the individual is already registered on GEMS, the system will find them and will allow the Lead Applicant to select them. Alternatively, the Scientific Mentor can be added manually by entering their name and email details. GEMS will send them an email with login details for completing the registration process and will inform them that they have been invited by the Lead Applicant to participate in the application as Scientific Mentor. Registered mentors can decide whether to accept or reject their participation. If the proposed Scientific Mentor rejects participation in an application, the Lead Applicant is informed and may revise the application accordingly. The Scientific Mentor who accepts will be able to complete some sections of the application and also edit the application. The system will flag if another user is working on the application form at the same time via a pop-up warning. A member of the applicant team may choose to over-ride this pop-up message and continue to enter data, but it is advisable that they contact the other person directly to avoid losing data when applying the override function.

Prior to validation and submitting the application to the authorised signatory of the nominated Host Institution for the final approval stage, the **Scientific Mentor must also approve the content of the application**.

Please note the section below must be completed by the Scientific Mentor.

5.2.1.1 GEMS Profile Details – Basic CV information

The Scientific Mentor's CV details (Name, ORCID, Institution, profession, education and employment history) are managed under the "Manage my Details" section of your GEMS account.

ORCID: The HRB is now an ORCID member. All researchers associated with an application are encouraged to include an ORCID iD by updating their GEMS profile under 'Manage my Details' and this will feed automatically into the application form. The ORCID profile should be up-to-date and can include all information found in a traditional CV, including your publication list, history of organisational affiliations, and other relevant information about your academic track record.

Please note you **do not** need to complete or update your publications or funding record under 'Manage my Details' as they will not feed through to this application and you will be asked to enter them manually in the section below.

5.2.1.2 Gender

Please select:

- Man.
- Woman.
- Other gender identity.
- Prefer to not disclose.

This question is included with the application form in light of the **HRB Gender Policy**. The HRB has the responsibility to support everyone to realise their full potential in order to ensure equality of opportunity and to maximise the quantity and the quality of research. The information will not be shared with reviewers, and it is for HRB internal use only.

5.2.1.3 Type of researcher

Please describe yourself as:

- Researcher - Academic[20]
- Researcher - Health and Social Care Practitioner[21] (with a joint academic appointment)

5.2.1.4 Breaks from research

In this section you may want to mention breaks from research, such as statutory leave, secondments, flexible work arrangements or other relevant changes (e.g. sector or discipline) that may have affected or influenced your progression as researcher. These periods will be taken into account to

[20] Academic researchers are individuals from a variety of disciplines who are conducting research and other academic activities in academic or other research performing organisation.

[21] Health and Social Care practitioners are individuals providing clinical care including medics, allied health professionals, dentists, nurses and midwives and pharmacists.

assess the overall active research experience for eligibility and assessment purposes. Please state the period and the reason. The word limit is **150 words**.

5.2.1.5 Key contributions

The aim of this section of the CV is to highlight key contributions that provide relevant context for reviewers and panel members. There are four different categories of contributions, and you should aim to cover as many as possible.

The activities under each category will be assessed in the context of your career stage and against the objectives of the scheme.

5.2.1.5.1 Contribution to the generation of knowledge

This section focuses on how you have contributed to the generation of knowledge, new ideas and hypotheses, and tools. This encompasses how you have communicated your ideas and research results (written and verbally), as well as funding and awards that you have received.

- List up to five research outputs that are most relevant to this application and include one reference per output, if applicable. For each output provide a short outline, your specific role, the significance and influence on the research field and/or discipline and/or to health policy and/or clinical practice and resulting impact, if any. The word limit is **400 words**.
- Provide a short statement of your overall contribution to the research field and/or discipline and/or policy and/or practice. The limit is **100 words**.
- Reference up to five independently peer-reviewed research funding awards (including those received from the HRB) most relevant to this application and please specify your role on each: Principal Investigator, Co-Principal Investigator (Co-Lead), Co-Applicant or Collaborator.

Research outputs: They can include datasets, software, publications, commercial or entrepreneurial or industrial products, educational products, clinical practice developments, policy publications, and other similar items. If an output has a DOI please only include this. Research outputs should be examples of rigorous science following high standards, that are reproducible, and others can build upon. Please indicate to what extent these outputs have been made openly available (providing evidence) to the research community and to potential users of research outputs.

Metrics: Please **do not** include information related to H-indexes, impact factors, or any type of metric that refers to the journal, publisher, or publication platform. The scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published. If you wish to reference publication citations, please note they should only be used to complement the narrative component of the CV and not in isolation.

5.2.1.5.2 Contribution to training and development of others

This section highlights your expertise which was critical to the success of other individuals either within your team, other teams and supervision and mentoring.

Please include some examples such as team support, supervision and/or mentoring activities, teaching activities, workshops or summer schools' involvement or support you provided to the advancement of colleagues (junior or senior) or strategic leadership by directing a team. The word limit is **200 words.**

5.2.1.5.3 Contribution to wider research community

This section emphasises the engagement to progressing the local and international research community.

This section emphasises the engagement to progressing the local and international research community. This may include:

1. Commitments including editing, reviewing, refereeing, committee/panel work and your contribution to the evaluation of researchers and research projects.
2. Contributions to increasing research integrity, and improving research culture (equality, diversity, mobility of researchers, and reward/recognition of researchers' broad range of activities, open science initiatives).
3. Appointments to positions of responsibility such as committee membership and corporate roles within your department, institution or organisation, and recognition by invitation within your sector.
4. Establishment of local/national/international collaborations, partnerships, and networks (including interdisciplinary and cross settings).
5. Strategic leadership by directing an organisation, company, or institution.

Please this list is not exhaustive.

Please provide some examples in bullet points under selected headings as most relevant to your career and experience to date. The word limit is **200 words**.

5.2.1.5.4 Contribution to broader society

This section emphasises societal engagement and knowledge exchange.

It may include:

1. Working with policymakers and knowledge users.
2. Public, patient and carer involvement in research (PPI), and collaborating with particular societal groups.
3. Science outreach activities for the general public or subsection of the general public
4. Engagement with industry and the private sector.

Please note this list is not exhaustive.

Please provide some examples in bullet points under selected headings as most relevant to your career and experience to date. The word limit is **200 words**.

Please note Section 5.2.1.6 must be completed by the Lead Applicant.

5.2.1.6 Mentorship arrangements

Please justify your choice of Mentor and explain how this mentorship will be of benefit to your career and the award. Please describe the arrangement you will have in place with your mentor during the award. The word limit is **200 words.**

5.2.2 The Host Institution Mentor

Lead Applicants must nominate a **Host Institution Mentor** based in the same Institution or Department for the purpose of providing supplementary guidance to the Lead Applicant during the award. For example: more career-specific or institutionally relevant guidance.

Please state their full name and position. Briefly explain your choice of Host Institution Mentor and how this additional mentorship will be of benefit to your career and the award. The word limit is **200 words.**

5.3 Co-Applicants

The Lead Applicant may collaborate, where appropriate, with partner organisations such as hospitals, health agencies, universities, local government, voluntary organisations and/or industry.

The Lead Applicant can add **up to five Co-Applicants** to an application by entering their name on GEMS. If the Co-Applicant is already registered on GEMS, the system will find them and will allow the Lead Applicant to select them. Alternatively, a Co-Applicant can be added manually by entering their name and email details. GEMS will send them an email with login details for completing the registration process and will inform them that they have been invited by the Lead Applicant to participate in the application as a Co-Applicant. **Registered Co-Applicants** can decide whether to accept or reject their participation and **must consent to the application being submitted jointly in their name**. If a Co-Applicant rejects participation in an application, the Lead Applicant is informed and may revise the application accordingly. Co-Applicants who accept to participate on an application will be able to edit the application. **The system will flag if another user is working on the application form at the same time via a pop-up warning. A member of the applicant team may choose to over-ride this pop-up message and continue to enter data, but it is advisable that they contact the other person directly to avoid losing data when applying the override function**.

Each Co-Applicant can manage their **contact and CV details** (Name, ORCID, Institution, profession, education, and employment history) under 'Manage my Details' section of GEMS and this information will be automatically included in any application that involves this individual.

Lead Applicants will be asked to select whether the Co-Applicant is a **Researcher – Academic, Researcher - Health and Social Care Practitioner, PPI Contributor[22], Knowledge User, Other Stakeholder or Expert** for the purpose of the proposed research. If a Co-applicants contributes from more than one perspective, please select the dominant role.

Lead Applicants should outline the role of each Co-Applicant on this project on a day-to-day basis, including the amount of time to be dedicated to working on this project either as a percentage or as a proportion of a full time equivalent (FTE). The word limit is **250 words.**

Please note: Section 5.3.1 to Section 5.3.4 of the application form should be completed by the Co-applicants themselves.

[22] The role of PPI contributors is defined in Appendix III - Public and Patient Involvement (PPI) in Research

5.3.1 Researcher Co-Applicants

Researcher Co-Applicants (both Academics and Health and Social Care Practitioners) will be asked to provide additional information in the application form.

Researcher Co-Applicants will be asked to reference **up to five** research outputs that are most relevant to the role in this application. For each output, please add a reference, if applicable, and explain very briefly (e.g. three-four lines) your specific contribution, the significance and impact to the field or to policy and/or practice for each entry. **Please note** the peer-reviewed publications under 'Manage my Details' will not feed to this application.

Research outputs: They can include datasets, software, publications, commercial or entrepreneurial or industrial products, educational products, clinical practice developments, policy publications, and other similar items. If an output has a DOI please only include this. Research outputs should be examples of rigorous science following high standards, that are reproducible, and others can build upon. Please indicate to what extent these outputs have been made openly available (providing evidence) to the research community and to potential users of research outputs.

Metrics: Please **do not** include information related to H-indexes, impact factors, or any type of metric that refers to the journal, publisher, or publication platform. The scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published. If you wish to reference publication citations, please note they should only be used to complement the narrative component of the CV and not in isolation.

Please note that additional information regarding supervisory experience, if planning to supervise a PhD candidate, and their current position and status (contract or permanent) will be requested in the application form.

The word limit is **400 words**.

5.3.2 Knowledge User Co-Applicants

Knowledge User Co-Applicants will be asked to provide information regarding **their expertise and experience in influencing decision making within knowledge user organisation(s).**

Knowledge User Co-Applicants will be asked to highlight their previous and current roles in influencing decision-making processes within their organisation or other relevant organisations. They should also use this space to highlight their specific experiences and expertise for the Knowledge User Co-Applicant role in relation to the proposed research. The word limit is **300 words**.

Knowledge User Co-Applicants will be asked to provide information regarding potential **additional experience and expertise relevant to this application**. For example, they may wish to include any relevant research experience/expertise, previous experience of working in collaboration or links with researchers to produce research or evidence for health, evidence of Patient and Public Involvement in your knowledge user role, and roles/responsibilities as a constructive and effective change agent. The word limit is **300 words**.

5.3.3 PPI Contributor Co-Applicants

PPI Contributor Co-Applicants should provide some information regarding their experience and expertise relevant to this application. For example, they may wish to include relevant experience as a

service user or carer, relevant experience from their personal lives, prior experience in PPI or any other useful background information. The word limit is **400 words**.

5.3.4 Other Stakeholder or Expert Co-Applicants

Other Stakeholder or Expert Co-Applicants should provide some information regarding their experience and expertise relevant to this application. For example, they may wish to include any relevant research experience/expertise, previous experience of working in collaboration or links with researchers to produce research or evidence for health. If they have research expertise/experience these Co-Applicants may wish to include relevant outputs such as publications, funding secured or other outputs. The word limit is **400 words**.

6 Host Institution letter of support

The Host Institution is required to provide a **Letter of Support** at Pre-application stage which confirms that the applicant is not recognised as an independent researcher by the host institution. This letter should be on headed paper and signed by the Dean of Research.

Lead Applicants **must not** be recognised as an independent investigator by:

1. Having already received an award in Ireland or abroad targeting the career stage of **transitioning towards research independence.**
2. Having already built a research team by securing, as **Lead Applicant**, any peer-reviewed research grant which supports research personnel.
3. Acting as the past or present primary supervisor or sponsor of an early career scholarship or fellowship (e.g. PhD, postdoctoral) awarded to another individual.
4. Being already recognised as an **independent investigator** as confirmed by their Host Institution.
5. Leading an **existing** research team.
6. Being named as the primary supervisor previously for a PhD candidate or other early career researchers. However, Lead Applicants may have some previous supervisory experience other than as primary supervisor.

Lead Applicants for which any or all the above pertain are ineligible to apply to this round of the ECSA scheme. Please contact the HRB if you are unsure.

7 Submission of Applications

The deadline for submission of complete applications is 09 November 2023 at 13:00.

1. After successful validation the Lead Applicant may submit the application. It will then be routed to the designated signatory at the Host Institution for their approval.
2. If a signatory rejects the application the Lead Applicant will be notified, along with any feedback the signatory has supplied.

3. The application can then be re-submitted; it will be returned to the signatory and will continue through the approval process as before.
4. On completion of the final approval by the Host Institution signatory the application automatically gets submitted to the HRB through GEMS for consideration for funding.
5. Upon submission to the HRB a grant application number is assigned to the application.

The HRB reserves the right to reject any application that does not meet the terms of this call.

Appendix II: EIA Scheme Application Remits

The details below are not exhaustive but should serve as a useful guide to applicants in considering relevance and eligibility for this scheme and in selecting the most appropriate remit for their application.

Patient-Oriented Research (POR)

Definition: Research conducted with human subjects, or on material of human origin, such as tissues, specimens, and cognitive phenomena. The research generally involves patients, samples and/or data from patient and other people who are not patients (e.g. healthy volunteers).

Under the POR remit, the HRB will consider research projects that involve pre-clinical studies, on the understanding that pre-clinical studies represent an important stage of research that occurs before testing in humans to find out if a drug, treatment, or procedure is likely to be useful. Such studies gather data on efficacy, feasibility, toxicity, safety, and supports patient eligibility criteria. They typically involve research using particular species of animals and in such cases the HRB will consider supporting animal work. However, appropriate evidence must be provided in the application setting out the case for the pre-clinical study, to justify the choice of species in a manner which resembles the human condition in aetiology, pathophysiology, symptomatology, and response to therapeutic intervention and describing how the pre-clinical study correlates and aligns with the planned future stages of the research study in humans. In some pre-clinical studies, due to the species-specific nature of the clinical product (e.g., some vector-expressed human transgenes or human derived cellular products) testing in animals would not prove informative or appropriate so alternative in vitro pre-clinical studies models can be proposed, but again detailed justification must be provided.

Only POR applications which begin with research activity to the right of the red line in Figure 1 will be considered as within remit for this scheme.

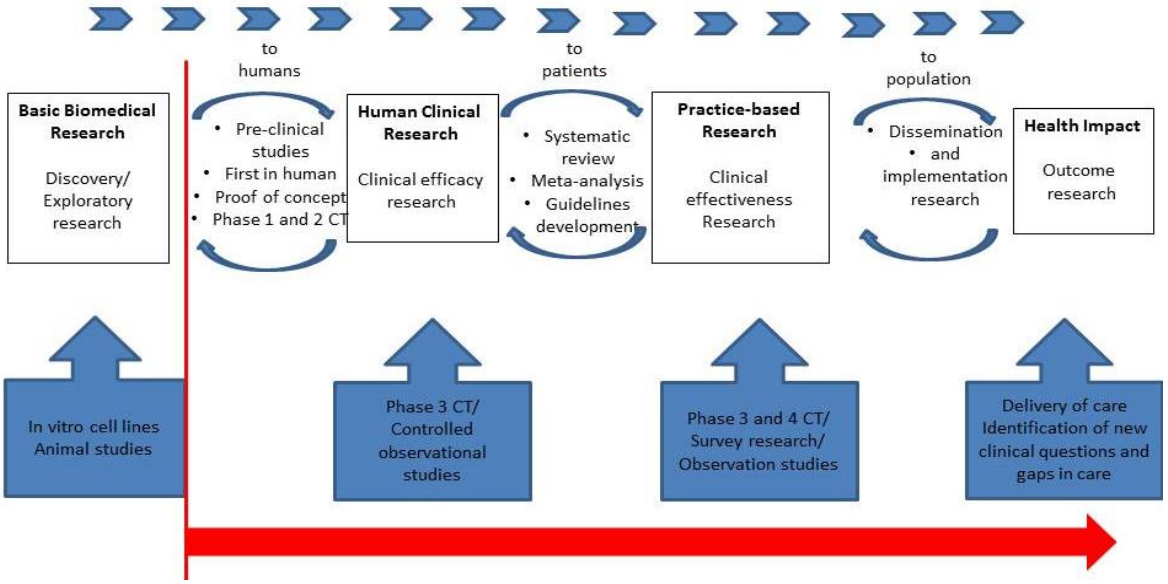

Figure 1: Continuum from research to impacts and outcomes.

Population Health Research (PHR)

Definition: Research with the goal of improving the health of the population, or of defined sub-populations, through a better understanding of the ways in which social, cultural, environmental, occupational and economic factors determine health status or through the identification of effective interventions for improving health status and reducing health inequalities.

The emphasis of PHR applications is on prevention of disease, promotion of health and wellbeing and the reduction of inequalities in health. Research focuses on the health of the whole population or on defined sub-groups and aims to generate evidence that is highly relevant to improving the health and wellbeing of the public.

Applications submitted under the PHR remit should focus on issues such as:

- Macro-level socio-economic determinants of health (the influence of social and economic policies on health)
- Individual-level socio-economic determinants of health (the relationships between access to the resources of society such as housing, income, employment, food security and health)
- Individual behavioural/lifestyle factors such as smoking, nutrition, alcohol and substance abuse, physical activity and sexual behaviour and their impact on health
- Occupational and environmental determinants
- The health of populations over the life course (e.g. birth, child and adult development and ageing)
- Health of specific population groups (e.g. children and youth, people with disabilities, older adults, migrant populations)
- Gender issues and health
- Health protection, promotion, health education and intervention programmes
- Genetic epidemiology
- Prevention and control
- Monitoring and surveillance of population health

Health Services Research (HSR)

Definition: Research with the goal of improving the efficiency and effectiveness of health professionals and the health care system through changes to practice and policy. Health services research is a multidisciplinary field of scientific investigation that studies how social factors, financing systems, organisational structures and processes, health technologies, and personal behaviours affect access to health care, the quality and cost of healthcare and ultimately health and well-being.

HSR remit includes proposals concerning the planning, management, organisation, financing, purchasing and provision of health and social care services. Such research may address aspects of the quality of services, access and equity in provision, relevance and appropriateness to the needs of individuals and communities, effectiveness and efficiency, workforce capacity and capability issues

and how services are experienced. Applications focusing on the three main dimensions of quality – patient safety, patient experience and effectiveness of care – are particularly welcome.

Applications focusing on issues such as the following are welcome:

- Access to services
- Strategic management of waiting times
- Health service planning
- Health service delivery and organization
- Integration of care
- Evaluation of health services interventions
- Delivery and organization of hospital and primary health care
- Community-based care (long-term care, home care)
- Chronic disease prevention and management
- Citizen engagement
- Health professional influences on health care
- Public and private health care sectors
- HR and financing of health services
- Health policy and systems management
- Health ethics and law
- Health informatics
- Pharmacoepidemiology
- Quality of life and quality of care
- Health systems and policy

Appendix III: HRB Funding Policies and Procedures

Access and support from research infrastructures

Applications availing of the advice, research design, data management services and/or other forms of support from a Clinical Research Facility/Centre (CRF/CRC), other infrastructure (e.g., Centre for Applied Medical Imaging, CAMI, Centre for Support and Training in Analysis and Research (CSTAR), HRB-Trials Methodology Research Network (HRB-TMRN), Cancer Groups, National clinical trials office (NCTO), CTNs or a biobank) are required to provide additional information detailing the scope and nature of the engagement (this includes national and international facilities, Units, and networks where justified).

An **Infrastructure Agreement form** will be requested as part of the application addressing the nature/scope of the service or collaboration, the rationale behind the choice of facility/centre/network and any costs associated with the project (including those provided as in-kind contributions). Applications proposing research with patients which do not detail advice and/or support from a CRF/CRC/CTU will be asked to justify why they have not done so.

Public and Patient Involvement (PPI) in Research

The HRB promotes the active involvement of members of the public and patients in the research that we fund[23]. Public and patient involvement in research means that the public and patients are involved in planning and doing research from start to finish and help tell the public about the results of research. PPI, as defined here, is distinct from and additional to activities which raise awareness, share knowledge, and create a dialogue with the public, and it is also distinct from recruitment of patients/members of the public as participants in research.

PPI represents an active partnership between members of the public and patients and researchers in the research process. This can include, for example, involvement in the selection of research topics, assisting in the design, advising throughout or at specific decision points of the research project or in carrying out the research.

PPI contributors should be actively involved and part of decision making. Involving members of the public in research can improve quality and relevance of research. It can:

- Provide a different perspective - even if you are an expert in your field, your knowledge and experience will be different to the experience of someone who is using the service or living with a health condition.
- Help to ensure that the research uses outcomes that are important to the public.
- Identify a wider set of research topics than if health or social care professionals had worked alone.
- Make the language and content of information such as questionnaires and information leaflets clear and accessible.

[23] https://www.hrb.ie/funding/funding-schemes/public-and-patient-involvement-in-research/

- Help to ensure that the methods proposed for the study are acceptable and sensitive to the situations of potential research participants.
- Help you increase participation in your research by making it more acceptable to potential participants.

In addition to improving relevance and quality of research, it ensures that research is influenced by broader principles of citizenship, accountability, and transparency. PPI is an ethos as well as a practice. It should be context-specific and should aim to ensure that all voices are heard. Where members of the public or patients are involved, they must be compensated for their time and contributions.

In the application, you are asked to describe any public involvement in your research throughout the various stages of identifying and prioritising the research question, the research design, conduct, analysis, and dissemination. We recognise that the nature and extent of active public involvement is likely to vary depending on the context of each study or award. PPI contributors should be named as Co-Applicants where it is justified by their level of involvement.

For guidance and support on PPI in your research please consult with the PPI Ignite Network Ireland or your Host Institution. The PPI Ignite Network Ireland has offices located in the following seven Host Institutions: DCU, NUIG, RCSI, TCD, UCC, UCD, UL.

FAIR Data Management and Stewardship

Data management/stewardship plans (DMP) are nowadays widely accepted as part of good research practice. The HRB support open research[24] and open publishing directly through the HRB Open Research platform[25]. The HRB is driving the making of research data **FAIR** (**F**indable, **A**ccessible, **I**nteroperable and **R**e-usable) in order to benefit science by increasing the re-use of data and by promoting transparency and accountability.

FAIR data principles[26] provide a guideline for those wishing to enhance the re-usability of their data holdings: these principles put specific emphasis on enhancing the ability of machines to automatically find and use the data, in addition to supporting its re-use by individuals. For researchers, the move to FAIR and open data, where applicable, means researchers should consider data management issues and find suitable data repositories at the research planning stage. Applicants will have to provide information about their plans for data management and data sharing at application stage.

In line with the HRB's policy on management and sharing of research data[27], all successful applicants are required to submit a completed data management plan (DMP) to the HRB on or before three months after the award start date, and a final updated version of the DMP with the last annual report.

[24] http://www.hrb.ie/funding/policies-and-principles/open-research/

[25] https://hrbopenresearch.org/

[26] https://www.nature.com/articles/sdata201618

[27] https://www.hrb.ie/fileadmin/user_upload/HRB_Policy_on_sharing_of_research_data.pdf

The DMP will need to be submitted alongside a certification of completion from the designated representative(s) within the Host Institution.

Applicants will have to provide an outline of their plans for data management and data sharing in the application inclusive of the costs associated to the plan.

The timing for completion and submission of the DMPs must be also included among the objectives and deliverables of the programme.

General Data Protection Regulation

The **General Data Protection Regulation** (GDPR) came into force on 25 May 2018. As a result, the applicant team will be asked through the HRB online grant management system GEMS to **confirm you understand** that personal data provided as part of this application, including but not limited to CV information, may be shared with person(s) based outside of the European Economic Area (EEA) for the specific purpose of obtaining peer reviews of this application. International reviewers play a vital role for the HRB in setting standards and in benchmarking our scientific community to enable them to operate in a global context. Individual peer reviewers are selected for their specific expertise in relation to submitted applications and can be based anywhere in the world.

Furthermore, by confirming participation, you will be asked to confirm you understand that HRB uses the information you provide (regarding all applicant team members) to consider your application, contact you about your application, and if you are successful, to manage your grant throughout its lifetime in accordance with HRB general T&C for research awards. This will include contacting you with regard to monitoring of progress through written reporting and other means e.g., interim review. We will publish some basic information on successful awards including PI, Host Institution, amount awarded and lay summary on our website and may highlight individual awards or researchers in more detail (with specific consent). We will also use the information you have provided to generate general statistics around our current funding portfolio, and to evaluate our funding mechanisms and investment. After your grant has ended, we will continue to keep your information on file (in accordance with HRB policies) to allow us to evaluate the outcomes, outputs and impacts of HRB investment in your research.

Please note that we will also use information associated with *unsuccessful* applications for a number of the purposes outlined above such as generating general statistics around our current funding portfolio, and to evaluate our funding mechanisms and investment e.g., demographics of applicants, research areas of applicants. Similarly, we will use the information provided about people employed on awards to help evaluate our career support and capacity building initiatives.

The Health Research Regulations

Following the implementation of GDPR, a regulation for health research known as the Health Research Regulations 2018 (S.I. 314) has been implemented, with further amendments made in 2019 (S.I. 188) and 2021 (S.I. 18)[28]. These regulations outline the mandatory suitable and specific measures for the processing of personal data for the purposes of health research. They further set out that explicit consent is a mandatory safeguard that must be obtained from individuals when using their

[28] http://www.irishstatutebook.ie/eli/2021/si/18/made/en/pdf

personal data for health research. Where it is not feasible to obtain explicit consent, an application for a consent declaration can be made to the Health Research Consent Declaration Committee[29].

Research on Research

The HRB is developing its approach to research on research (RoR) with the aim of enhancing the evidence base for HRB research funding practices. We may also collaborate with researchers on request regarding specific RoR questions. Should your application become of interest to such a study, the HRB will seek your consent for the use of your information.

HRB Gender Policy

In line with international best practice, the **HRB Gender Policy**[30] recognises the responsibility of the HRB to support everyone to realise their full potential in order to ensure equality of opportunity and to maximise the quantity and the quality of research. To ensure fairness and equality to all applicants, each funding application received will be assessed as outlined in the call guidance documentation for that particular funding round. To ensure gender balance in decision-making, the HRB aims to reach the international best practice target of 40% of the under-represented gender in all HRB panels where possible. Gender will also be considered when appointing the position of Panel Chair.

Conflict of Interest

Conflict of interest rules *are applied rigorously*. Where a conflict of interest exists, the reviewer is requested to inform the HRB immediately so that an alternative reviewer may be appointed. International peer reviewers will not provide comments or scores on any application on which they have a conflict of interest.

Reviewers must adhere to high standards of integrity during the peer review process. They must respect the intellectual property of applicants and may not appropriate and use as their own, or disclose to any third party, ideas, concepts, or data contained in the applications they review.

Appeals Procedure

The HRB's Policy on Appeals on funding decisions is available at https://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/hrb-policy-on-appeals/**.**

Privacy Policy and Retention Policy

To understand why we collect the information we collect and what we do with that information, please see our Privacy[31] and Retention Policies[32].

[29] https://hrcdc.ie/

[30] http://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/hrb-policy-on-gender-in-research-funding/

[31] https://www.hrb.ie/about/legal/privacy-policy/

[32] https://www.hrb.ie/fileadmin/user_upload/HRB_Document_retention_policy..docx

Appendix IV: Resources/Useful Links

STUDY DESIGN FOR INTERVENTIONS

"Defining Feasibility and Pilot Studies in Preparation for Randomised Controlled Trials: Development of a Conceptual Framework" by Eldridge S. *et al.*

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0150205

"The PRECIS-2 tool: designing trials that are fit for purpose" by Louden et al.

http://dx.doi.org/10.1136/bmj.h2147

"A process for Decision-making after Pilot and feasibility Trials (ADePT): development following a feasibility study of a complex intervention for pelvic organ prolapse" by Bugge C et al.

http://trialsjournal.biomedcentral.com/articles/10.1186/1745-6215-14-353

"Developing and Evaluating Complex Interventions" by MRC, UK

www.mrc.ac.uk/complexinterventionsguidance

"Process evaluation of complex interventions: Medical Research Council guidance" by Moore GF. et al.

http://dx.doi.org/10.1136/bmj.h1258

"Using natural experiments to evaluate population health interventions: Guidance for producers and users of research evidence" by MRC, UK

www.mrc.ac.uk/naturalexperimentsguidance

Consort 2010 Statement: updated guidelines for reporting parallel group randomised trials

www.consort-statement.org

SQUIRE Guidelines: provides a framework that authors can use when developing applications or writing research articles about quality improvement

www.squire-statement.org

HIQA Guidelines for the Economic Evaluation of Health Technologies in Ireland (2018)

https://www.hiqa.ie/reports-and-publications/health-technology-assessment/guidelines-economic-evaluation-health

HIQA Guidelines for the budget Impact Analysis of Health Technologies in Ireland (2015)

https://www.hiqa.ie/system/files/Guidance_on_Budget_Impact_Analysis_of_Health_Technologies_in_Ireland.pdf

HIQA Guidelines for Evaluating the Clinical Effectiveness of Health technologies in Ireland (2011)

http://www.hiqa.ie/system/files/HTA-Clinical-Effectiveness-Guidelines.pdf

STUDY REGISTRATION

International Clinical Trials Registration Platform (run by the WHO)

http://apps.who.int/trialsearch/Default.aspx

European Clinical Trials Database (EudraCT): database of all regulated clinical trials which commenced in the EU from 1 May 2004

https://eudract.ema.europa.eu/results-web/

US National Library of Medicine database: database of privately and publicly funded clinical studies – regulated and unregulated - conducted around the world.

https://www.clinicaltrials.gov/

REPORTING

COMET (Core Outcome Measures in Effectiveness Trials) Initiative:

Development and application of agreed standardised sets of outcomes, known as 'core outcome sets'

http://www.comet-initiative.org/

EQUATOR Network Library for health research reporting:

An international initiative that seeks to improve reliability and value of health research literature by promoting transparent and accurate reporting of research studies.

https://www.equator-network.org/library/

Registry of Research Data Repositories

http://www.re3data.org/

Zenodo Data Repository (OpenAIR)

https://zenodo.org/about

https://zenodo.org/

EVIDENCE SYNTHESIS

Evidence Synthesis Ireland: aims to build evidence synthesis knowledge, awareness and capacity among the public, health care institutions and policymakers, clinicians, and researchers on the Island of Ireland.

https://evidencesynthesisireland.ie/

The Cochrane Library: online collection of databases in medicine and other healthcare specialties which summarise and interpret the results of medical research.

www.thecochranelibrary.com

The Campbell Collaboration: promotes positive social and economic change through the production and use of systematic reviews and other evidence synthesis for evidence-based policy and practice.

https://www.campbellcollaboration.org/

The Campbell Collaboration UK & Ireland: hub at Queens University Belfast.

https://www.qub.ac.uk/research-centres/CampbellUKIreland/

EQUATOR Network Library for health research reporting: an international initiative that seeks to improve reliability and value of health research literature by promoting transparent and accurate reporting of research studies.

http://www.equator-network.org/resource-centre/library-of-health-research-reporting/

CLINICAL RESEARCH INFRASTRUCTURES

All Ireland Hub for Trials Methodology Research

http://www.qub.ac.uk/research-centres/CentreforPublicHealth/Research/TheAll-IrelandHubforTrialsMethodologyResearch/

Centre for Advanced Medical Imaging, St James' Hospital Dublin

http://www.3tcentre.com/

Centre for Support and training Analysis and Research (CSTAR)

http://www.cstar.ie

Children's Clinical Research Unit

https://www.nationalchildrensresearchcentre.ie/childrens-clinical-research-unit/apply-for-support/

Clinical Research Support Unit, Limerick

https://www.ul.ie/hri/clinical-research-support-unit

Clinical Research Centre, Royal College of Surgeons in Ireland

https://www.rcsi.com/dublin/research-and-innovation/research/resources-and-facilities/clinical-research-centre

Clinical Research Facility, University College Dublin

http://www.ucd.ie/medicine/ourresearch/researchenvironment/ucdclinicalresearchcentre/

Clinical Research Support Centre (Northern Ireland)

http://www.crsc.n-i.nhs.uk/

HRB Clinical Research Facility, Cork (HRB CRFC)

http://www.ucc.ie/en/crfc/

HRB Clinical Research Facility, Galway (HRB CRFG)

http://www.nuigalway.ie/hrb_crfg/

HRB Critical Care Clinical Trials Network (HRB Critical Care CTN)

ICC-CTN (iccctn.org)

HRB Irish Network for Children's Clinical Trials (in4kinds)

In4kids

HRB Primary Care Clinical Trials Network (HRB Primary Care CTN)

Primary Care Clinical Trials Network Ireland - HRB PC CTNI (primarycaretrials.ie)

HRB Trials Methodology Research Network (TMRN)

http://www.hrb-tmrn.ie

The National Clinical Trials Office (NCTO)

Email trials-ireland@ucc.ie

https://ncto.ie/

Wellcome Trust-Health Research Board Clinical Research Facility, St James's Hospital (WT-HRB CRF SJH)

http://www.sjhcrf.ie/

BIOBANKING

Council of Europe Recommendation of the Committee of Ministers to member States on research on biological materials of human origin (2016)

https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=090000168064e8ff

BBMRI-ERIC is a European research infrastructure for biobanking

https://www.bbmri-eric.eu/

OECD Guidelines on Human Biobanks and Genetic Research Databases

http://www.oecd.org/science/biotech/44054609.pdf

ISBER Best Practices for Repositories

https://www.isber.org/page/BPR

Molecular Medicine Ireland Biobanking Guidelines

http://www.molecularmedicineireland.ie/resources/biobanking-guidelines/

NCI Best Practices for Biospecimen Resources (2016 version)

https://biospecimens.cancer.gov/bestpractices/2016-NCIBestPractices.pdf

PUBLIC AND PATIENT INVOLVEMENT IN RESEARCH & RESEARCH PRIORITIES

The National PPI Ignite Network

https://ppinetwork.ie/

NIHR PPI resources

https://www.nihr.ac.uk/documents/ppi-patient-and-public-involvement-resources-for-applicants-to-nihr-research-programmes/23437

Patient-Centred Outcomes Research Institute (PCORI)

http://www.pcori.org

Public Involvement Impact Assessment Framework: Provides tools for successful involvement of members of the public in research projects and for assessment of impacts.

http://piiaf.org.uk/

NIHR Payment guidance for researchers and professionals

https://www.nihr.ac.uk/documents/payment-guidance-for-researchers-and-professionals/27392

European Patient Forum Value + Handbook: For Project Co-ordinators, Leaders and Promoters on Meaningful Patient Involvement.

http://www.eu-patient.eu/globalassets/projects/valueplus/doc_epf_handbook.pdf

The James Lind Alliance Priority Setting Partnerships: Research priorities in disease areas set jointly by patients, clinicians, and researchers.

http://www.jla.nihr.ac.uk/

Campus Engage: Supporting Irish HEIs to embed civic engagement in their work. Includes resources, how-to-guides, and case studies for engaged research.

http://www.campusengage.ie/what-we-do/publications/

UK Standards for Public Involvement: The six UK Standards for Public Involvement provide clear, concise statements of effective public involvement against which improvement can be assessed.

https://sites.google.com/nihr.ac.uk/pi-standards/home

The Involvement Matrix: A tool for researchers/project leaders to promote collaboration with patients in projects and research.

https://www.kcrutrecht.nl/involvement-matrix/

THE EVALUATION TOOLKIT

This is a resource designed for practitioners of the health sector, produced after the completion of a rigorous systematic review of patient and public engagement evaluation tools.
https://ceppp.ca/en/evaluation-toolkit/

GRIPP2 reporting checklists: Tools to improve reporting of patient and public involvement in research

https://researchinvolvement.biomedcentral.com/articles/10.1186/s40900-017-0062-2#Tab1

USE OF ANIMALS IN RESEARCH

EU Reference Laboratory for alternatives to animal testing (EURL ECVAM) (reviews of available non animal models)

https://joint-research-centre.ec.europa.eu/eu-reference-laboratory-alternatives-animal-testing-eurl-ecvam_en

Experimental Design Assistant (EDA) (online tool for design of animal experiments)

https://eda.nc3rs.org.uk/

PREPARE (Planning Research and Experimental Procedures on Animals: Recommendations for Excellence) guidelines

https://norecopa.no/prepare

ARRIVE (Animal Research: Reporting of In Vivo Experiments) guidelines

https://arriveguidelines.org/

SYRCLE (Guidance and training on systematic review of animal studies)

https://www.syrcle.network/

GENDER AND/OR SEX ISSUES IN RESEARCH

Examples of case studies in Health & Medicine where gender/sex in research matters

http://genderedinnovations.stanford.edu/case-studies-medicine.html

Gender Toolkit in EU-funded research for examples and guidance

http://www.yellowwindow.be/genderinresearch/downloads/YW2009_GenderToolKit_Module1.pdf

Sex/Gender Influences in Health and Disease

https://orwh.od.nih.gov/sex-gender/sexgender-influences-health-and-disease

Methods and Techniques for Integrating Sex into Research

https://orwh.od.nih.gov/sex-gender/methods-techniques-integrating-sex-research

NIH Policy on Sex as a Biological Variable

https://orwh.od.nih.gov/sex-gender/nih-policy-sex-biological-variable

DATA MANAGEMENT AND SHARNG AND FAIR PRINCIPLES

Digital Curation Centre: How to develop a data management and sharing plan and examples DMPs.

http://www.dcc.ac.uk/resources/data-management-plans/guidance-examples

FAIR data principles FORCE 11

https://www.force11.org/fairprinciples

UK Concordat on Open Research Data (July 2016)

https://www.ukri.org/wp-content/uploads/2020/10/UKRI-020920-ConcordatonOpenResearchData.pdf

Guidelines on FAIR data management plans in Horizon 2020

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

FAIR at the Dutch centre for Life sciences

https://www.dtls.nl/fair-data/

Registry of Research Data Repositories

http://www.re3data.org/

RESEARCH DATA MANAGEMENT PLANS

Data Stewardship Wizard created by ELIXIR CZ and NL

https://dmp.fairdata.solutions/

DMPonline of the Digital Curation Centre (DCC), UK

https://dmponline.dcc.ac.uk/

DMPTool of University of California Curation Center of the California Digital Library (CDL), USA

https://dmptool.org/

RDMO Research Data Management Organiser of the German Research Foundation, Germany

https://rdmorganiser.github.io/en/

Guidelines on FAIR data management plans in Horizon 2020

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

KNOWLEDGE TRANSLATION RESOURCES

Health Service Executive Research & Development Main Page

https://hseresearch.ie/research-dissemination-and-translation/

Health Service Executive Research & Development: Knowledge Translation, Dissemination, and Impact A Practical Guide for Researchers

https://hseresearch.ie/wp-content/uploads/2021/04/Tools-and-templates-.pdf

Integrated Knowledge Translation (iKT) NUI Galway

https://www.nuigalway.ie/hbcrg/ikt/

The Canadian Institutes of Health Research: Guide to Knowledge Translation Planning

https://cihr-irsc.gc.ca/e/45321.html

Training Institute for Dissemination and Implementation Research in Health: Open Access Course

https://cancercontrol.cancer.gov/is/training-education/TIDIRC-open-access

IMPLEMENTATION SCIENCE RESOURCES

Centre for Effective Services

https://www.effectiveservices.org/resources/implementation

UCC Implementation Science Training Institute

https://www.ucc.ie/en/cpd/options/medhealth/cpd1778uccimplementationsciencetraininginstitute/

European Implementation Collaborative

https://implementation.eu/resources/

CO-CREATION RESOURCES

ACCOMPLISSH Guide to impact planning

https://www.accomplissh.eu/publications-and-deliverables

Working together to co-create knowledge: A unique co-creation tool – Carnegie UK Trust

https://www.carnegieuktrust.org.uk/publications/working-together-to-co-create-knowledge-a-unique-co-creation-tool/

INFORMATION ON PERSISTENT IDENTIFIERS

DOI: List of current DOI registration agencies provided by the International DOI Foundation

http://www.doi.org/registration_agencies.html

Handle: Assigning, managing and resolving persistent identifiers for digital objects and other Internet resources provided by the Corporation for National Research Initiatives (CNRI)

http://www.handle.net/

PURL: Persistent Identifiers developed by the Online Computer Library Center (OCLC). Since 2016 hosted by the Internet Archive

https://archive.org/services/purl/

URN: List of all registered namespaces provided by the Internet Assigned Numbers Authority (IANA)

https://www.iana.org/assignments/urn-namespaces/urn-namespaces.xml

DATA REPOSITORIES

Registry of Research Data Repositories

http://www.re3data.org/

Data centers accredited by the German Data forum according to uniform and transparent standards (Germany)

https://www.ratswd.de/forschungsdaten/fdz

Zenodo Data Repository (OpenAIR)

https://zenodo.org/

FAIR/OTHER USEFUL LINKS

Main FAIR Principles

https://www.go-fair.org/fair-principles/

UK Concordat on Open Research Data (July 2016)

http://www.rcuk.ac.uk/documents/documents/concordatopenresearchdata-pdf/

Tool that helps to select and apply a license to a resource, provided by Creative Commons

https://creativecommons.org/choose/

Appendix V: HRB Research Career Pathways for Academic Researchers and Health and Social Care Practitioners