Emerging Investigator Awards for Health (EIA) 2022

Supporting new independent investigators who can facilitate actionable knowledge in health research

Guidance Notes

Deadline	Key Dates and Times
Applications Open	02 June 2021
Pre-Application closes	19 August 2021 @ 13:00
Full Application open (by invitation only)	Mid-October 2021
Full Application closes	Mid-January 2022

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 II 'Detailed guidance on the EIA pre-application form' prior to starting an application GEMS.

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1 Overview

The Emerging Investigator Awards (EIA) aim to develop a new cohort of talented independent investigators who can translate knowledge generated through research into the health care system, policies or practice, or generate research findings informed by policy and practice.

This scheme targets academic health researchers who have a minimum of four years active post-doctoral research experience and are currently progressing towards research independence. Each award will support the salary of the awardee to provide protected time for research, as well as funding for a research project and for research personnel. Awards will have a duration of up to four years and an upper limit of approximately **€800K** inclusive of overheads.

The scheme mirrors the Emerging Clinician Scientist Awards, which is targeted towards health and care practitioners involved in health research.

2 Introduction

The recently launched Health Research Board (HRB) Strategy 2021 – 2025: Health research – making an impact [1] highlights six strategic objectives for the HRB over the next five years, 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.

In line with the strategic objective of building a strong and supportive environment for health research in Ireland, the HRB is now inviting applications for the 2022 Emerging Investigator Awards for Health (EIA). This is the third round for this scheme with 22 awards made between 2017 and 2019 and it is expected that the HRB will make up to nine awards in this round.

3 Aims and Objectives

The overarching **aim** of the HRB Emerging Investigator Awards for Health is to create a cohort of new and talented independent investigators by facilitating and supporting the transition of these individuals from postdoctoral researchers to independent and self-directed health research investigators in the Republic of Ireland.

The main objectives of this scheme are to:

1. Support talented individuals at a critical career transition stage to establish themselves as independent health investigators in an academic or other research-based institution.

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

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-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 as shown in Figure 1 below. 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 is not targeted towards individuals who have already established research independence.

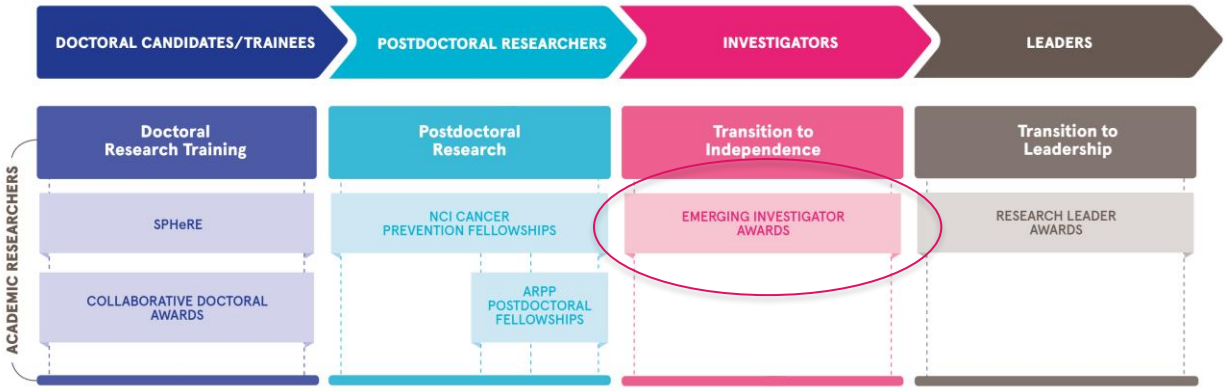


Figure 1: Research career path for academic researchers

4 Summary of revisions to the 2022 round

The following revisions to the scheme have been applied based on

1. HRB staff reflections from the previous rounds of the call;
2. Panel member feedback from previous rounds of the call;
3. The launch of the health and care practitioners career pathway, in March 2019.

4.1 Eligibility of the Lead Applicant

4.1.1 Applicant type

The EIA funding call is now **open only** to academic researchers who are engaged in health-related research activities mainly in academic or other research institutions.

Individuals who are health and care practitioners involved in delivery of care should apply to the Emerging Clinician Scientist Awards (ECSA) scheme. The next round of the scheme is envisaged in Q1 in 2022.

Full details of the suitability and eligibility of lead applicant can be found in section 8.1 - Lead Applicant, pages 8 – 10.

4.1.2 Previous research funding

The requirement for a funding limit of no more than €100K has been removed, however the eligibility criteria have been adjusted to better reflect the targeted career stage of transitioning to research independence. Full details of Lead Applicant eligibility can be found in section 8.1.2 - Lead Applicant Eligibility Criteria, pages 9 - 11.

4.2 Funding

Three changes have been made related to the funding available for the 2022 call. These include

- the calculation of the overhead contribution at award stage;
- the inclusion of a cap of €300K on direct research costs;
- the inclusion of a cap of €15K on dissemination costs.

A full overview of funding available for the call can be found in section 6 – Funding and Duration, pages 6 and 7.

4.3 Review criteria

The review criteria for full application stage has been reduced from five to three criteria as follows:

- Applicant
- Research Project
- Support

The three assessment criteria are weighted as follows: Applicant - 40%, Research Project - 30% and Support – 30%. The final score is calculated as the weighted average of the three sub-scores. Full details, including definitions, of the full application review criteria can be found on page 20 within section 13 - Application and review process.

4.4 Determining factors for equally ranked applications

In the event that there are two or more proposals with the same final score around the funding cut-off within the ranked list, two further ranking factors (sub-score awarded to lead applicant (first) and balance between research disciplines (second)) are now applied to distinguish between applications. These are in addition to the gender balance of lead applicants (now the third ranking factor). Full details of the three ranking factors can be found on page 20 within section 13.2 - Full Application Stage.

4.5 Review Process

The following two steps have been introduced into the review process for **the full application stage** (by invitation only) of this EIA round:

- Two public reviewers will be invited by the HRB, in addition to international peer-reviewers, to review each full application.

- An Applicant Response phase will now be incorporated into the review process.

Full details of the review process can be found in section 13 - Application and review process, pages 17 – 21.

4.6 Host Institution letter of support

Letters of support are now required at Pre-application stage and Full Application stage.

Full details regarding HI support can be found in section 10.1 Host institution, page 15.

5 Scope

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, and who are capable to become independent investigators. A full overview of research scope for EIA 2022 is included in Appendix I.

This scheme will not fund:

- Applications involving basic biomedical research;
- Applications using cell lines, animals or their tissue that do not constitute pre-clinical research (see Appendix I for a definition of pre-clinical research in the context of this scheme)
- Stand-alone systematic reviews;
- Applications seeking to evaluate an intervention;
- Applications that aim to conduct a stand-alone feasibility study for an intervention;
- 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;
- Applications which are solely literature reviews, audits, surveys, needs assessments or technology development (although these elements may be part of an integrated research study);
- Applications which are solely or predominately developing the infrastructure for biobanking, databases or patient registers without a predominant research element;
- Applications from individuals applying for, holding, or employed under a research grant from the Tobacco industry;
- 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.

Note: Please note that applicants can propose to develop an intervention and may also include initial testing of the intervention in order to provide proof of concept data aimed to develop a feasibility study as next step (beyond this project).

Where an application is outside the scope of the scheme, the application will be deemed ineligible and will not be accepted for review.

6 Funding and Duration

The budget **must include the salary of the Lead Applicant** to ensure protected time to conduct the research. Research related costs are capped at a maximum value of **€300K.** Research related costs do not include the salary and salary related costs of the Lead Applicant. The overhead contribution to the HI will be calculated by the HRB at award stage. Awards will have an upper limit of approximately **€800K** once overheads are included.

The requested budget 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.

The duration of each award is **four years.**

6.1 Salary-related costs for the Lead Applicant

Salary must be requested to ensure the applicant has protected time to conduct the research**.**

Salary can be requested as follows:

- on **full time basis** (1.0 FTE) for up to four years or
- on **part-time basis** with at least **0.5 FTE protected time for research, funded by the HRB** for up to four years. Part-time arrangements may be requested for example where an awardee wishes to combine their EIA research programme with other academic activities or if their preference is to work in a part-time capacity due to personal circumstances.

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

6.2 Research-related costs

Research related costs are capped at a **maximum of €300K** (excluding overheads). However, applicants should apply for a level of direct research costs appropriate to their research project. It is expected that, on average, research cost requests would be in the region of €220K to €250K. Requests close to the maximum value of €300K will need to be highly justified. Research related costs include the following categories:

- Costs for funded personnel necessary for the proposed research project. Salary-related costs in line with the most recent IUA scale or stipend and fee (EU rate only) related costs for funded personnel on the proposed research project. Please note if requesting a PhD candidate, you should budget for four years of funding. The HRB strongly encourages four-year support in line with other HRB funded doctoral training programmes such as SPHeRE,

ICAT and Collaborative Doctoral Awards; support of less than four years must be strongly justified.

- Running costs for the project; e.g. consumables, PPI costs, non-dissemination associated travel costs;
- FAIR Data management costs (e.g. service/fees from data steward, access to secondary data, cost for metadata, cost of data sharing, etc.);
- Equipment, to a maximum value of €50K for start-up costs, where justified;
- Research and professional skill development for the Lead Applicant and for research staff, where justified;
- Dissemination and knowledge exchange activities to a maximum of €15K unless clearly justified by outreach or similar activities.

6.3 Overhead contribution

In accordance with the HRB Policy on Overhead Usage[2], 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.

7 Team Based and Collaborative Approach

The proposal must have a team-based and collaborative approach to maximise actionable knowledge. The research team is defined as the Lead Applicant as the lead of the team, the mentor, co-applicants, official collaborators and funded personnel. It should involve health researchers and/or professionals and/or innovators[3] as appropriate to address the research question, and to respond to the objectives of the EIA call. 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:

- contain the necessary **breadth and depth** of expertise in all methodologies, skills and competencies required;
- have appropriate **cross-disciplinary and/or cross-border and/or inter-sectoral** members. Where relevant, experts in similar or different disciplines, such as but not limited to

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

biomedical research, statistics, health economics, health service research, behavioural science, qualitative research methodologies, sociology etc., should 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;

- have **patient and public 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.

8 Suitability and Eligibility Criteria for the Research Team

8.1 Lead Applicant

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.

The Lead Applicant will be responsible for the scientific and technical direction of the research project. 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.

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 (e.g. up to 10% if taking the award full time or pro-rata otherwise) may be dedicated to teaching or other academic activities.

8.1.1 Lead Applicant Suitability

The Emerging Investigator Awards target researchers 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

- Appropriate evidence of expertise matching the nature and context of the project;

- 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.
- Sufficient expertise, skills, and capabilities to demonstrate the potential of becoming independent investigators;
- Some experience, capability and authority to supervise researchers (e.g. early stage researchers, research assistants, other health and care practitioners), but not as primary supervisors leading research project(s) independently;
- A track record in independently 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.
- A clear research vision during and beyond the award;
- A clear career trajectory to become an independent investigator during and beyond the award.

8.1.2 Lead Applicant Eligibility Criteria

Lead Applicants eligible for this scheme are **postdoctoral researchers** from different disciplines who are engaged in health-related research activities typically in **academic or other research institutions**. Health and social care practitioners engaged in delivering clinical practice should apply to the Emerging Clinician Scientist Award scheme.

8.1.2.1 Qualification:

Lead Applicants must have:

- a PhD or
- have been granted PhD equivalence by the HRB (are proven to have at least four years of active research experience post-primary degree).

Note: **PhD equivalence** must be granted by the HRB before the call submission date and will not be considered after application submission. PhD equivalence can be granted only to individuals who are not undertaking a PhD at the time of submission. Individuals currently studying for a PhD are ineligible to apply to this funding call. This includes individuals who have research experience prior to starting their 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.

8.1.2.2 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 2017 or before are eligible to apply for EIA 2022 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.

The Lead Applicant must not be as yet recognised as an independent investigator by

- having already received an award in Ireland or abroad targeting the career stage of transitioning towards research independence;
- having already built a research team by securing, as Lead Applicant, any peer-reviewed research grant which supports research personnel;
- 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;
- being already recognised as an independent investigator as confirmed by their Host Institution.

8.1.2.3 Employment history

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

Lead Applicants **can**

- hold fixed term post-doctoral or other research based positions;
- be currently on a career break or working outside the academic setting;
- be currently working overseas;

Lead Applicants **must not** hold

a) a permanent position (academic or other)

b) 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 (19 August 2021).

8.2 Mentor

The Lead Applicant **must nominate a mentor** who will provide support and guidance to the Lead Applicant during the award for the research project, career milestones and research vision. The mentor will also be supporting the LA in the acquisition of the set of skills necessary for having an effective and active role in actionable knowledge in health research. The Mentor will need to

approve their participation and complete the mentor section in the online application before it is submitted.

It is strongly advised that the mentor will not be the current sponsor of the Lead Applicant, and preferably should not be based in the same Department as the Lead Applicant. This is aimed to facilitate (1) an appropriate balance between the supporting and guiding role of the mentor, and (2) the independence to be achieved by the Lead Applicant during the award.

The mentor should be an individual who has strong evidence of:

- expertise and a skillset in knowledge application and/or translation and/or implementation;
- experience in networking, collaborating and ideally influencing clinicians, executives, health care personnel, policy makers and/or other relevant stakeholders;
- leadership experience;
- experience in conducting research projects and programmes;
- track record in scholarly publication and communication (peer-review articles, research data publications, national or international briefing/reports, etc.);
- coaching and mentoring.

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

Please note that Lead Applicants also have the option to nominate an additional mentor based in the same Institution or Department for the purpose of providing supplementary guidance to the Lead Applicant during the award, if relevant. For example: more career-specific or institutionally relevant guidance.

8.3 Co-Applicants

A Co-Applicant has a well-defined, critical and substantial role in the conduct and steering of the proposed research. Co-Applicants from outside of the Republic of Ireland are welcome where the nature of the research renders this necessary, and is appropriately justified. A Co-Applicant may receive funding for items such as running costs and personnel but will not receive support towards his/her own salary if they are in salaried positions. Up to a maximum of **5 research Co-Applicants** can be included.

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 advises 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.

8.4 Collaborators

An official Collaborator is an individual or an organisation who will have an integral and discrete role in delivering the research activities 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 a Collaborator if they are

providing specific contributions (either direct or indirect) to the activities. Collaborators can come from a range of backgrounds, for example academia, the private sector, a healthcare organisation, the charity sector or a patient group **(up to a maximum of 10 Collaborators can be listed)**.

Note: it is not mandatory to have 10 Collaborators, but this is to allow for flexibility should this seem appropriate.

At 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. A template collaboration agreement form can be downloaded from the collaborator section of the online application form at full application stage.

8.5 Funded personnel

Lead Applicants must demonstrate clearly that the level, expertise and experience of proposed research personnel matches the ambition and scale of the project proposed 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 given strong consideration. Reviewers will thoroughly assess the level of baseline experience matched with the supervisory and up-skilling arrangements proposed in scoring the proposal.

Lead Applicants must carefully consider how the complexity, scale, objectives and dependencies of the project match the skills and expertise required for conducting the project. Where early stage career personnel registered for a higher degree are proposed to work on the project, the proposal should clearly demonstrate some previous supervisory experience of the Lead Applicant (even if not officially as primary supervisor) as well as 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. In such instances, Lead Applicants are also strongly encouraged to think about the suitability of such projects for PhD candidates, in terms of delivering a clearly identifiable original research project or potential difficulties in clustering various pieces of work packages of PhD thesis. If requesting a PhD candidate, you must typically budget for four years funding for this individual. The HRB strongly encourage four-year support in line with other HRB funded doctoral training programmes such as SPHeRE, ICAT and Collaborative Doctoral Awards (CDA).

Note: If the project is within the Population Health Sciences or Health Services Research (PHHSR) areas and the LA is requesting a PhD candidate, the HRB strongly recommends that the LA provide some training through the SPHeRE PhD programme[4], which is Ireland's national research training programme for PHHSR. It is not necessary to have a candidate identified at this early stage, however, please note that identified/nominated candidates will need to apply officially to the SPHeRE programme (usually around March) and have to be interviewed by the SPHeRE Directors in collaborations with the LA (usually at the end of May). No additional fees (in additional to the student fees) accrue to the SPHeRE programme for the inclusion of a self-funded Scholar. Please also note that the purchase of some or all SPHeRE training modules (six in total) in year 1 may be another option to provide a more structured training to the PhD candidate through SPHeRE. Please contact the Programme Manager Elaine Healy (elainehealy@rcsi.ie)

[4] https://www.sphereprogramme.ie/

8.6 Public, Patient and Carer Involvement (PPI)

What is PPI?

The HRB promotes the active involvement of members of the public, patients and carers in the research that we fund. Public, Patient and Carer Involvement (PPI) is research carried out 'with' or 'by' members of the public rather than 'to', 'about' or 'for' them. 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/carers as participants in research.

PPI represents an active partnership between members of the public, patients and carers and researchers in the research process. This can include, for example, involvement in the choice of research topics, assisting in the design, advising throughout or at particular 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
- make the language and content of information such as questionnaires and information leaflets clear and accessible
- help to ensure that the methods proposed for the study are acceptable and sensitive to the situations of potential research participants
- 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
- 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 justified by their level of involvement.

We strongly advise that you consult with your Host Institution who may be able to provide guidance and support on PPI in research.

9 FAIR Data Management and Stewardship

Data management/stewardship plans (DMP) are nowadays widely accepted as part of good research practice. The HRB supports **open research**[5] and open publishing directly through the **HRB open research platform**[6]. The HRB is now 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[7] provide guidelines 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[8], all successful applicants are required to submit a completed data management plan (DMP) to the HRB at the beginning of the award and a final updated version of the DMP with the last annual report.

For this funding call, an initial data management plan is required three months after the start date of the award.

- 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 full 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.

10 Host institution and other support

10.1 Host institution

The Host Institution for the award must be on the HRB list of approved Host Institutions (see http://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/hrb-policy-on-approval-of-host-institutions/) and be nominated by the Lead Applicant. A Host Institution may partner with a health service organisation if beneficial for the delivery of the research project.

The Host Institution

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

[6] https://hrbopenresearch.org/

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

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

- 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 s/he will be fully responsible for at least the duration of the award.
- Will sustain and support the successful Lead Applicant during the duration of the award by providing other support, such as access to infrastructure, mentoring and in-house training (e.g. leadership) and networking activities, etc. A Host Institution may partner with a health service organisation or other relevant organisation if beneficial for the delivery of the research project.

The HRB has a **strong expectation** that the Host Institution **will extend support** to the successful individual **beyond the duration of this award** with a full-time faculty appointment.

The Host Institution is required to provide **Letters of Support**

- at pre application stage which confirms that the applicant is not recognised as an independent researcher by the host institution and
- at full application stage which clearly describes how the host institution will support the Lead Applicant for the duration of the HRB award. Please note that all commitments made to the applicant in the HI letter of support are reviewable and are expected to be fulfilled in full should the proposal be successful. The HRB will follow up with the RO and the HI to ensure delivery of commitments made, where required.

These letters of support should be on headed paper and signed by the Dean of Research.

11 Access and Support from Research Infrastructures

Where relevant, applicants are expected to avail of the advice, trial and data management services and/or other forms of support from existing research infrastructures such as a Clinical Research Facility/Centre (CRF/CRC), National Centre for Advanced Medical Imaging (CAMI), Biobanking facilities or other HI or hospital based infrastructures etc.

At full application stage, Lead Applicants need to provide an **Infrastructure Agreement Form** (including national and international infrastructures as required). The form sets out:

- The nature and scope of the service or collaboration
- The rationale behind the choice of infrastructure and
- Any costs associated with the project (including those provided as in-kind contributions).

12 The General Data Protection Regulation (GDPR)

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 the 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.

13 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)[9]. 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 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[10].

14 Application and review process

Applications must be completed and submitted through the HRB online Grant E-Management System (GEMS) (https://grants.hrb.ie). The Emerging Investigator Awards for Health scheme 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).
    - GEMS will close the pre-application stage automatically at the stated deadline and timeline (**19 August 2021 @ 13:00**).

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

[10] https://hrcdc.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 transparent process underpinned by quality, excellence and 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.

The HRB is a signatory of DORA (San Francisco Declaration of Research Assessment)[11] and has revised the lead applicant's and the research team sections in many funding schemes. We ask additional questions addressing (1) contribution to knowledge, (2) contribution to research and career development of other researchers, (3) contribution to the wider research community and society and (4) a personal declaration. The aim is to provide additional information on the value, quality and impact of the applicant's work and the suitability of the applicant to the funding scheme and the research project proposed.

The HRB has never guided reviewers to consider impact factors or H-index. We now explicitly guide reviewers to assess the track record of the lead applicants and research team based on:

- The content, quality and impact/influence of the research outputs in the research field and/or in policy and practice.
- Different types of research outputs in addition to articles (e.g. research data and datasets, research material, databases, audio/video products, national and/or international reports, patents, models and protocols, software production, evidence of influence to health policy and practice, outreach and/or knowledge exchange activities, media coverage or other relevant activities).
- Active research experience of the Lead Applicant. In this case career breaks, flexible working arrangements, changes in discipline and sector (e.g. industry, health organisation/agency) should be taken into consideration and appropriate adjustments made when considering the record and impact of outputs.

14.1 Pre-Application Stage

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 and (3) Details of the **Core Research Team** (mentor and co-applicants)**.**

The pre-applications will be checked for eligibility and will be sent to a specially convened international review panel for assessment. Members of the review panel are selected based on the range of disciplines, methodologies and expertise appropriate to the scheme.

The Pre-application Review Panel will discuss the eligible pre-applications and will rank them based on the three assessment criteria below, which have equal weight.

[11] https://sfdora.org/

1. The potential of the Lead Applicant to become an independent investigator;
2. Relevance of the research question and the potential for actionable knowledge;
3. Fit of the research team with the research question and the objective to facilitate actionable knowledge.

The panel will make a recommendation on a selected number of Lead Applicants to be invited to full application stage. A brief feedback document from the panel discussion will be provided to all applicants.

14.2 Full Application Stage - by invitation only

Full applications must be submitted through the HRB online Grant E-Management System (GEMS) (https://grants.hrb.ie). information provided 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 panel feedback provided to the Lead Applicant after the pre-application panel review stage. 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:

International Peer Review, Public Review and Applicant Response

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 Review

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 Review

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:

- The Plain English Summary (Lay Summary)
- Relevance of the Proposed Research Question
- Public and Patient Involvement in development of and throughout the project
- Research Design - inclusion of research participants (where applicable)
- 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.

Applicant response

The Lead applicant and research team will be provided with a time-limited opportunity to respond to peer and public review comments (see Section 16: Timeframe).

The peer-review and public review comments will be made available to the Lead Applicant on their personal GEMS page. Each Lead applicant will have 10 working days only to submit their response through GEMS, and the response has a maximum word count of 2500 words, including references. This wordcount is broken down into 2000 words only for the peer review response and 500 words only for the public review response. 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 the review discussion summary provided to lead applicants at the conclusion of the Pre-application stage.

This phase of the assessment process is extremely important, and the response will likely play a critical role in whether a proposal ultimately gets recommended for funding or not. It provides an opportunity to address any factual errors, conceptual misunderstandings or differences of opinion that can be perceived as weaknesses or concerns. It also provides the Leadership Team with an opportunity to take on board any constructive feedback that may help to improve the application, if funded, or future grant applications.

The response should be succinct yet clear and comprehensive. It should address all of the significant concerns and/or weaknesses described in the reviewer's feedback. If the applicant team disagrees with a reviewer's statement they should explain why and provide additional information. If the applicant team cannot address an issue, they should, at a minimum, acknowledge it. Responses that could be construed as argumentative should be avoided. Please note HRB reviewers volunteer their own time in reviewing grant applications.

Interview Panel

The Interview Panel will comprise of an independent Chair and approximately 6-7 members. 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. The comments from the international peer-reviewers will be provided to the Lead Applicants prior to the interview. This will provide the Lead Applicants and their team with an opportunity to address the key comments, suggestions, misconceptions, etc. during the interview.

At the end of the interview panel meeting, a final score is collectively agreed for each application and then they will be ranked according to score. HRB staff members are present to clarify any procedural aspects for the Chair or Panel members and to take notes for the feedback process.

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 applicants to notify them of the outcome. It is estimated that from the deadline of the call to the HRB decision after the assessment will take approximately ten months.

The peer-reviewers and panel reviewers will assess all full applications based on the following assessment criteria. Successful programmes must score highly in all 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. **Applicant:** Potential of the Lead Applicant to become an independent investigator as evidenced by their track record and research vision.
2. **Research Project:**
    a) Relevance of the research question and potential for actionable knowledge.
    b) Appropriate research design and methodology to address the research question.
3. **Support:**
    a) Fit of the research team with the research question and the expertise required to facilitate actionable knowledge.
    b) The suitability of the Mentor(s).
    c) Host institution support during and beyond the award.

The three assessment criteria are weighted as follows - Applicant -40%, Research Project - 30%, Support - 30%. The final score is the calculated weighted average of the three sub-scores.

Note: In the event that there are two or more proposals with the same final score around the funding 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 applicant will be the **second ranking factor** to prioritise proposals. This applies separately to both the shortlisting and Interview Panel ranked lists. This means the under-represented discipline within the ranked list will be prioritised. In line with the **HRB Gender Policy**, which came into effect on 1 June 2016, **the gender balance** of Lead applicants within the ranked list will be the **third ranking factor**.

Please note that the final application scores awarded by the interview panel **may** be published on the HRB website for your reference. The score meter for the EIA 2022 funding call would include **only** the HRB application reference number assigned at full application submission. No other identification information would be published alongside the score.

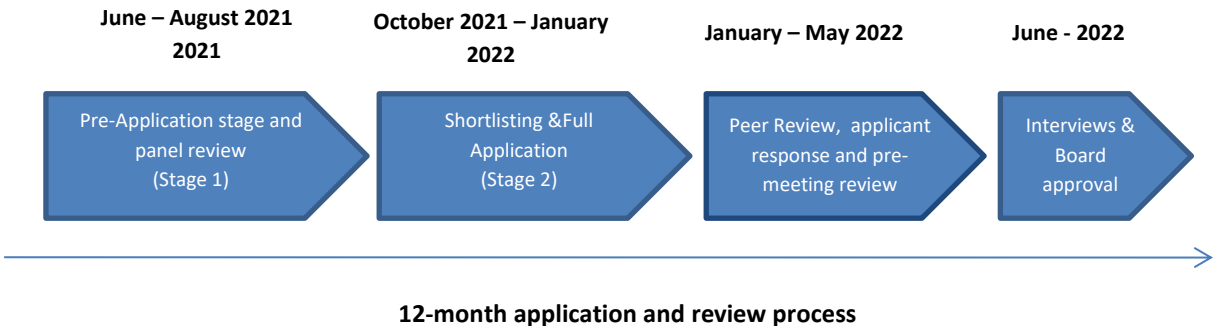
15 Conflict of Interest

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 are required to respect the confidentiality of the peer review process, which is designed to protect and preserve the integrity of the HRB's advisers and processes. Reviewers may not discuss

any aspect of the scoring or assessment with applicants or colleagues. All such requests must be referred to the HRB.

16 Timeline



12-month application and review process

Pre-application Stage	
02 June 2021	Call opening for Pre-Application stage
19 August 2021	Deadline for Pre-application submissions
03 Sept 2021	Eligibility completed and start of shortlisting review by Panel
2nd week in October	Shortlisting Panel meeting
2nd week in October	Notification to all applicants and invitation to full application stage for a selected number of applicants

Full Application Stage	
Mid-January 2022	Submission of full applications
Mid-April 2022	End of peer and public review
Early May 2022	End of the Applicant Response Phase and start of Panel review stage
First week in June 2022	Interview Panel Meeting
End-June 2022	Board Approval
July – August 2022	Budget negotiation
September/ October 2022	Contracting
November 2022 onwards	Earlier start date for awards

17 Contact for pre-application stage

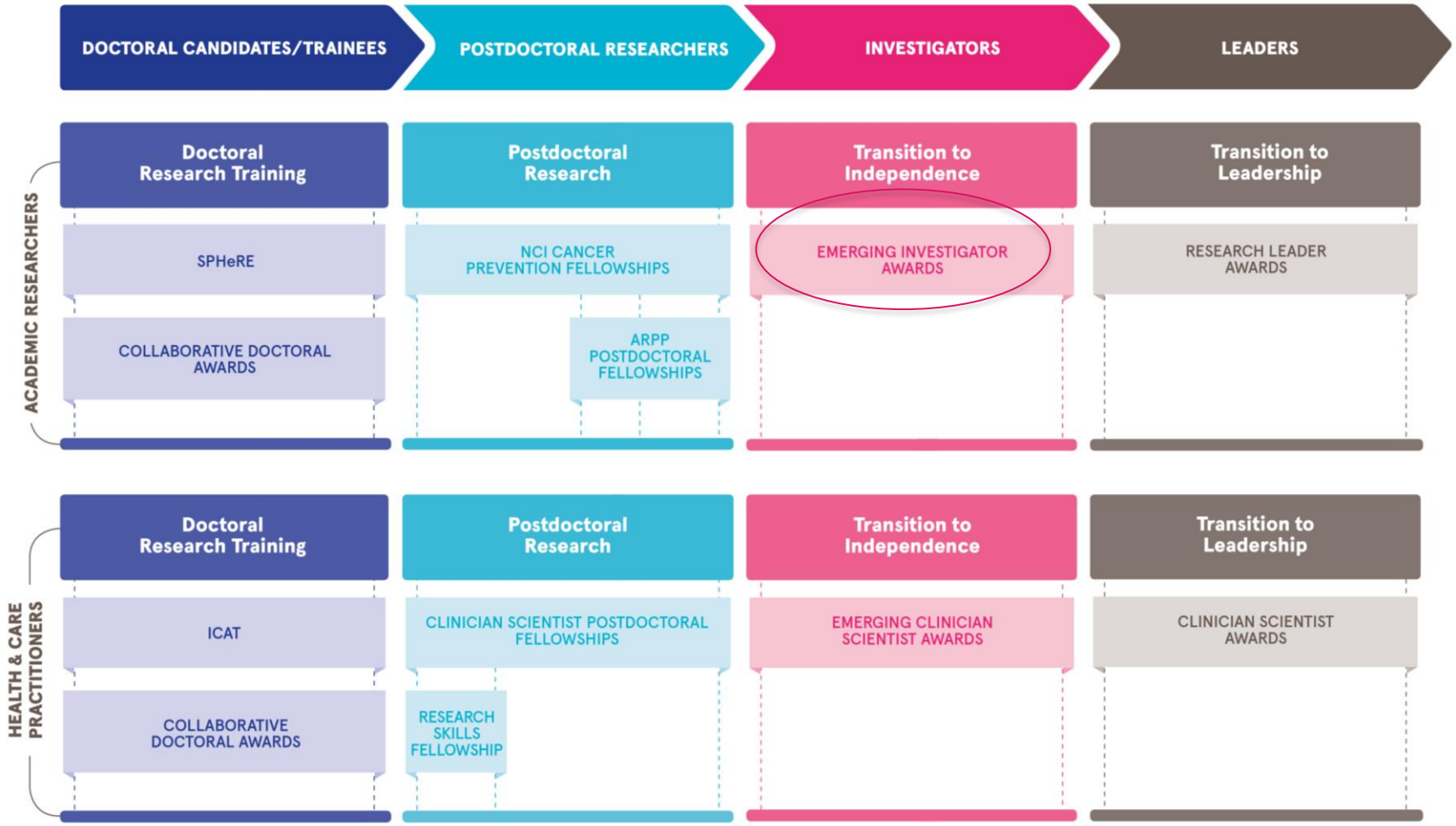
For further information on the **Emerging Investigator Awards for Health 2022** please contact:

Dr Anne Costello

Project Officer
Investigator-led Grants, Research Careers and Enablers
Health Research Board
e acostello@hrb.ie
t 01-2345 157

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 http://www.hrb.ie/funding/funding-schemes/before-you-apply/relevant-policies/

18 HRB Research Career Path for Academic Researchers and Health and Care Practitioners



Further information can be found on the HRB website at the following link: https://www.hrb.ie/funding/funding-schemes/health-research-career-paths/academic-researchers/

Appendix I – Scheme Research 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 proposal. Applications will be reviewed upon receipt by HRB staff based on the criteria below. In the case of any queries regarding appropriateness or eligibility, staff will consult with the appointed international Chair of the interview Panel before making a final decision.

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 to be within remit for this scheme.

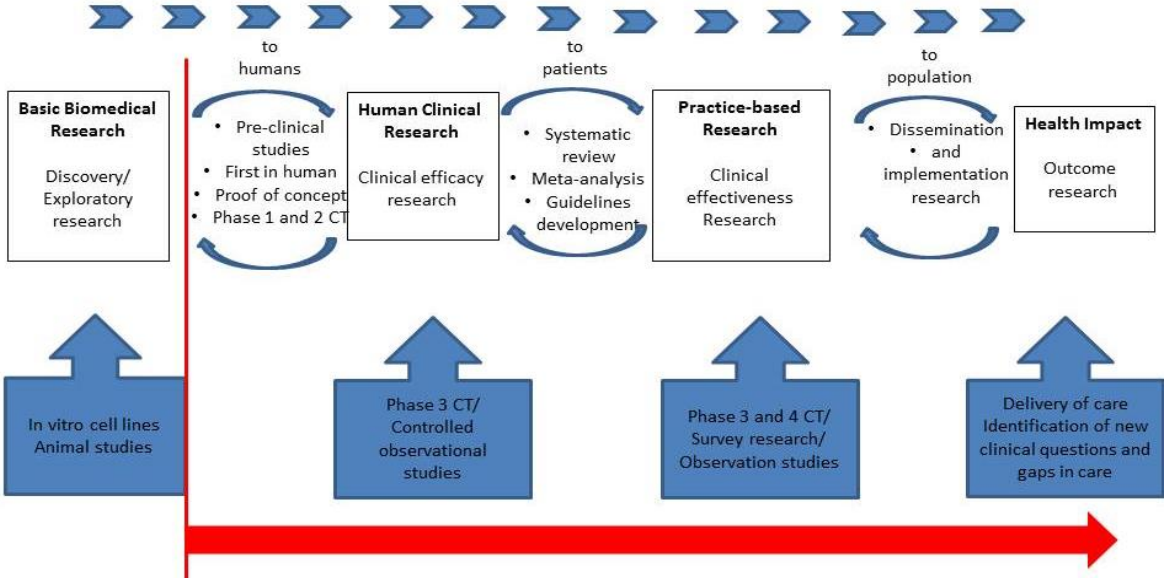


Figure 1: Continuum from research to impacts and outcomes

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 II: Detailed Guidance on the EIA Pre-application Form

Only registered users of the GEMS system can apply for grants. In order 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.

When the Lead Applicant opens a new application in GEMS, they 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. The checklist for the Emerging Investigator Awards is as follows:

Lead Applicant Eligibility	
Please confirm you are not as yet recognised as an independent investigator by having already built a research team or by leading a research programme in your own right.	✓
Please confirm you have a PhD or have been granted PhD equivalence by the HRB (are proven to have at least four years of active research experience post-primary degree).	✓
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 2017 or before are eligible to apply for EIA 2022 unless they have gaps (e.g. career breaks, flexible working arrangements) in their curriculum vitae. Please confirm you have at least four years active post PhD (or equivalent) research experience.	✓
Please confirm you have not already received an award in Ireland or abroad targeting the career stage of transitioning towards research independence.	✓
Please confirm you have not secured, as Lead Applicant, any peer-reviewed research grant which supports research personnel.	✓
Please confirm you have not acted or are acting as the past, or present, primary supervisor or sponsor of an early career scholarship or fellowship (e.g. PhD, postdoctoral researcher) awarded to another individual.	✓
Please confirm you are not already recognised as an independent investigator by your Host Institution.	✓
Please confirm you 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 (19 August 2021).	✓
Application Scope Eligibility	
Please confirm that you have read the scope section of the Guidance notes (page 5) and Appendix I, and you are confident that the research you intend to propose is in scope for the EIA 2022 funding call	✓

Other Requirements	
By submitting this application, I agree to (a) sharing of my data outside of the European Economic Area (EEA) for the purpose of international peer review, and (b) the use of my data for assessment of my application; monitoring of successful awards; and evaluation of HRB's approach to funding and investment in research, in line with HRB policies and as detailed in the EIA 2022 Call Guidance Notes.	✓

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.

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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 of the HRB's award schemes. 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. Information is available on the HRB website on the current approved Host Institutions and on the application process for research performing organisations to be approved as HRB Host Institutions[12].

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 HI name is entered accurately and in full as an incorrect entry may result in delays in attaining Host Institution approvals.

[12] https://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/approval-of-host-institutions.

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 2022 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 HI signatory must confirm their willingness to participate as HI 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

This should be descriptive and concise and should reflect the aim of the project.

1.2 Project Title Acronym

This is optional

1.3 Project Abstract

This should be a succinct summary of the proposed research project. The aims and hypotheses of the project should be conveyed with clarity. The objectives of the project and what the work is expected to establish should be described. Ideally it provides a clear synopsis of your proposal and should set the research proposal in context. The word limit is **300 words**.

1.4 Keywords

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

2 The Lead Applicant

GEMS Profile Details – Basic CV information

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

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

Note: The HRB is now 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.

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 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.

Additional proof of eligibility

1. Please state your current position, type (e.g. fixed term, permanent) and length of contract you currently hold;
2. Please enter the date you defended your PhD thesis. If you do not have a PhD and have checked your eligibility prior to submitting an application, please add 'PhD equivalency approved';
3. Please state whether you have, or have not, secured funding, as Lead Applicant, which supports research staff. Please list any funding awards you have received as Lead Applicant and list all staff members supported through those awards, if any.

2.1 Career breaks

Please detail any career breaks stating the period and the reason (e.g. statutory leave, flexible work arrangement, other family care responsibilities, illness, disability), and/or change in sector (e.g. academia to private sector) or discipline. Any time period not spent in research will be accounted for where outputs are assessed as part of the review process and also for eligibility purposes. The word limit is **150 words**.

2.2 Contribution to knowledge

2.2.1 Most relevant funding track record

Please 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: Principle Investigator, Co-Principle Investigator (Co-Lead), Co-Applicant or Collaborator.

2.2.2 Most relevant research outputs

- Please reference **up to five** research outputs that are most relevant to your role on this application. Please include one reference per output, if applicable, and explain very briefly for each (e.g. three-four lines) your specific contribution and the significance and impact to the field or to policy and/or practice.
- Please provide the total number of peer reviewed publications which you have authored and/or co-authored.
- Please add the weblink to your full list of peer-reviewed publications.

The limit is **300 words**.

Please note in line with the San Francisco declaration on Research Assessment **DORA**[13] the HRB ask reviewers to consider the value, quality and impact of the applicant's work. Applicants may reference research outputs such as peer-reviewed publications, research data and databases, research material, audio/video products, national and/or international reports or briefs, models and protocols, software, evidence of influencing policy and/or practice, outreach and/or knowledge exchange activities, media coverage or other research-related relevant activities.

Note: 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, rather than to the individual output item; the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

2.2.3 Contribution to training and development of other researchers

Describe your experience of contribution to supervision of early career researchers at (PhD and/or MSc candidates) as well as other individuals (e.g. clinical fellows, research assistants) including those from outside your own discipline, if any. The word limit is **200 words.**

Note: the primary supervision of research staff funded through an award secured in your name as Lead Applicant will render you ineligible for EIA 2022.

2.2.4 Contribution to wider research, community and society

Academic profile and synergistic activities

The aim of this section is to enable a rounded recognition of your career to date by providing a holistic overview of your academic and professional profile.

Please provide some examples (bullet points) under selected headings as most relevant to your career and experience to date and not addressed in other section of your CV. The assumption is that not all Lead Applicants will, necessarily, have experience under all these headings. These activities will be assessed in the overall context of the career stage of the individual, the role in the programme and the objectives of this scheme.

[13] https://www.hrb.ie/funding/funding-schemes/before-you-apply/how-we-assess-applications/declaration-on-research-assessment/

Examples of topics you may address are listed below. This list is meant as guidance and you do not need to address all these topics and may choose to include others.

- Stakeholder engagement and/or PPI activities/initiatives;
- Collaborative & cross disciplinary research;
- Research integrity;
- Contribution to Open Science (open data, data sharing and open access, workshops/seminars);
- Knowledge translation activities that best relate to the work described in your application. E.g. communication & dissemination (beyond publications), development of IP (patents, licenses), development of guidelines and standards, knowledge exchange and outreach activities;
- Teaching and other related activities (e.g. coordinator of modules, courses, etc);
- Peer-review and/or panel review contributions;
- Networking activities;
- Memberships to committees, scientific boards, editorial boards, national or international groups etc;
- Honours/awards, national and international profiling, plenary lectures;
- Administrative and managerial tasks, project management and other professional development.

The word limit is **200 words**.

2.3 Part-time arrangements

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

Y/N

2.3.2 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).

2.3.3 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**.

2.4 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 **250 words**.

3 Research Project Description

3.1 Research question

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

3.2 Case for the research

Please set out a case for the **relevance and importance** at local, national or international level to propose this research project at this time in Ireland.

Please address the following:

- Outline the problem to be addressed and the relevance to policy and practice (locally, nationally or internationally); please reference any document/publications;
- Describe any systematic review, or alternative evidence collected systematically supporting why this research project should be conducted now and include the knowledge gaps in the research area;
- Include a description of any pilot work/data already undertaken or the use of existing national or international data;
- Describe the anticipated outputs and outcomes.

The word limit is **1,500 words**.

Note: Be aware that the peer reviewers and panel reviewers reading your application will be based outside of Ireland, so it is important to describe the current healthcare delivery context in Ireland when discussing issues around need and relevance.

3.3 Overarching Aim

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

3.4 Brief overview of the methodological approach

Please briefly describe your main methodological approach to address the research question. The word limit is **500 words**.

3.5 Use of pre-clinical models

Do you propose to use a pre-clinical model or models?

Y/N

If Yes,

Please explain the **rationale** of your choice and 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). The word limit is **200 words**.

3.6 Public, Patient and Carer 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 [III]. Please be aware there are PPI Ignite network offices in some host institutions.

Are you including public involvement in your application?

If Yes,

Please briefly describe the approach you plan to take to public, patient and carer involvement at each stage of the research cycle.

If No,

Please explain why PPI is not relevant to your project.

The word limit is **200 words.**

3.7 Pathway to Actionable Knowledge Statement – outline

Please outline the likely potential of the research findings to be applied and/or translated towards improving health care systems, policies and/or practice and to generate evidence informed by policy and practice. **Further detail will be required at full application stage**. The word limit is **200 words.**

3.8 References

A full description of the references cited should be provided. You can enter a maximum of **15 publications.** Please enter references in the same format. At full application stage the reference number will be increased to 30 publications.

For peer-reviewed 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 citation[14]:

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

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

4 The research team – Mentor(s) and Co-Applicants

4.1 Mentor

The Lead Applicant can add a Mentor to an application by entering the name on GEMS. The mentor should be chosen based on their research expertise and ability to guide the applicant in various areas of the research programme. It is anticipated that the mentor(s) would not have previously been supervisor to the applicant and ideally would not be based in the same research department.

Please note that Lead Applicants also have the option to nominate an additional mentor based in the same Institution or Department for the purpose of providing supplementary guidance to the Lead Applicant, for example more career-specific and institutionally relevant guidance.

If the individual is already registered on GEMS, the system will find them and will allow the Lead Applicant to select her/him. Alternatively, the 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 Mentor. Registered Mentor can decide whether to accept or reject their participation. If the proposed mentor rejects participation in an application, the Lead Applicant is informed and may revise the application accordingly. The Mentor who accepts will be able to complete some section 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 **Mentor must also approve the content of the application**.

Please note the section below must be completed by the Mentor

GEMS Profile Details – Basic CV information

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

[14] Please refer to FORCE 11 principles for further information https://www.force11.org/group/joint-declaration-data-citation-principles-final

Note: The HRB is now an ORCID member. Mentors 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 the application. For more information and to register please see https://orcid.org/.

Please note you do not need to complete or update your funding record or publications 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.

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[15]. The HRB has the responsibility to support both women and men 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.**

4.1.1 Type of Researcher

Please describe yourself as:

- Researcher - Academic
- Researcher - Health and Care practitioner (with a joint academic appointment)

4.1.2 Career breaks

Please detail any career breaks stating the period and the reason (e.g. statutory leave, flexible work arrangement, other family care responsibilities, illness, disability), and/or change in sector (e.g. academia to private sector) or discipline. Any time period not spent in research will be accounted for where outputs are assessed as part of the review process. The word limit is **150 words**.

4.1.3 Mentor's contribution to knowledge

4.1.3.1 Mentor's most relevant funding track record

Please 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: Principle Investigator, Co-Principle Investigator (Co-Lead), Co-Applicant or Collaborator. The word limit is **300 words**.

[15] https://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/gender-in-research-funding/

4.1.3.2 Mentor's most relevant research outputs

- Please reference **up to five** research outputs that are most relevant to your role on this application. Please include one reference per output, if applicable, and explain very briefly for each (e.g. three-four lines) your specific contribution and the significance and impact to the research field and/or to policy and/or practice.
- Please provide the total number of peer reviewed publications which you have authored and/or co-authored.
- Please add the weblink to your full list of peer-reviewed publications.

The word limit is **300 words**.

Please note in line with the San Francisco declaration on Research Assessment **DORA**[16] the HRB ask reviewers to consider the value, quality and impact of the applicant's work. Applicants may reference research outputs such as peer-reviewed publications, research data and databases, research material, audio/video products, national and/or international reports or briefs, models and protocols, software, evidence of influencing policy and/or practice, outreach and/or knowledge exchange activities, media coverage or other research-related relevant activities.

Note: 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, rather than to the individual output item; the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

4.1.4 Mentor's contribution to training and development of other researchers

Describe **your experience as supervisor and/or career/personal mentor** to researchers at different career stages (PhD and MSc candidates, postdoctoral/research fellows) as well as other individuals (e.g. clinical fellows, research assistants) including those from outside your own discipline, if any. Briefly describe the names of these individuals, their position while in your team, their position now and your actual contribution to their career development and progression. The word limit is **200 words.**

4.1.5 Mentor's contribution to wider research, community and society

Academic profile and synergistic activities

The aim of this section is to enable a rounded recognition of your career to date by providing a holistic overview of your academic and professional profile.

Provide some examples (bullet points) under selected headings as most relevant to your career and experience to date and not addressed in other section of your CV. The assumption is that the mentor will not, necessarily, have experience under all these headings. These activities will be assessed in the overall context of the career stage of the individual, the role in the programme and the objectives of this scheme.

[16] https://www.hrb.ie/funding/funding-schemes/before-you-apply/how-we-assess-applications/declaration-on-research-assessment/

Examples of topics you may address are listed below. This list is meant as guidance and you do not need to address all these topics and may choose to include others.

- Stakeholder engagement and/or PPI activities/initiatives;
- Collaborative & cross disciplinary research;
- Research integrity;
- Contribution to Open Science (open data, data sharing and open access, workshops/seminars);
- Knowledge translation activities that best relate to the work described in your application. E.g. communication & dissemination (beyond publications), development of IP (patents, licenses), development of guidelines and standards, knowledge exchange and outreach activities;
- Teaching and other related activities (e.g. coordinator of modules, courses, etc);
- Peer-review and/or panel review contributions;
- Networking activities;
- Memberships to committees, scientific boards, editorial boards, national or international groups etc;
- Honours/awards, national and international profiling, plenary lectures;
- Administrative and managerial tasks, project management and other professional development.

The word limit is **200 words**.

Please note sections 4.2 and 4.3 below must be completed by the Lead Applicant.

4.2 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.**

4.3 Additional Mentor

Lead Applicants also have the option to nominate an additional mentor based in the same Institution or Department for the purpose of providing supplementary guidance to the Lead Applicant during the award, if relevant. For example: more career-specific or institutionally relevant guidance.

Would you like to add an additional mentor?

- No
- Yes – Please state their full name and position. Briefly explain your choice of additional mentor and how this additional mentorship will be of benefit to your career and the award. The word limit is **100 words**.

4.4 Co-applicant/Mentor

Do you wish to add your Primary Mentor as a Co-applicant also, due to their specific role on the project?

Y/N

If yes:

Please describe the specific role the Mentor will have as a Co-applicant in this project and clearly justify this role. The word limit is **200 words**.

Note: Where a Mentor is also a Co-applicant you may add **up to four additional Co-applicants** in section 4.4.

Please note Co-applicants must complete their own details section in the application form.

4.5 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. Where you choose to add your Primary Mentor as a Co-applicant up to four additional Co-applicants can be added in this section. 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 consent or not 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.

Note: 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.

Co-applicant GEMS Profile Details – Basic CV information

Co-applicant CV details (name, ORCID iD, institution, profession, education and employment history) and funding records are managed under the “Manage my Details” section of your GEMS account.

Note: The HRB is now an ORCID member. CO-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 the application. For more information and to register please see https://orcid.org/ .

Please note you do not need to complete or update your publications 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.

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[17]. The HRB has the responsibility to support both women and men 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.

Participant Type

Please describe yourself as:

- Researcher - Academic
- Researcher - Health and Care practitioner
- Health and Care Practitioner - In practice only
- PPI Contributor
- Knowledge User
- Stakeholder from private sector
- Other stakeholder or expert, please specify

Career breaks

Please detail any career breaks stating the period and the reason (e.g. statutory leave, flexible work arrangement, other family care responsibilities, illness, disability), and/or change in sector (e.g. academia to private sector) or discipline. Any time period not spent in research will be accounted for where outputs are assessed as part of the review process. The word limit is **150 words**.

Most relevant funding track record

Please 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: Principle Investigator, Co-Principle Investigator (Co-Lead), Co-Applicant or Collaborator. The word limit is **300 words**.

[17] https://www.hrb.ie/funding/funding-schemes/before-you-apply/all-grant-policies/gender-in-research-funding/

Research outputs

- Please reference **up to five** research outputs that are most relevant to your role in this application. Include one reference per output, 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 provide the total number of peer reviewed publications which you have authored and/or co-authored.
- Please add the weblink to your full list of peer-reviewed publications.

The word limit is **300 words**.

Note: In line with the San Francisco Declaration of Research Assessment **DORA**[18] the HRB ask reviewers to consider the value, quality and impact of the applicant's work. Co-applicants may list research outputs such as peer-reviewed publications, research data and databases, research material, audio/video products, national and/or international reports or briefs, models and protocols, software, evidence of influencing policy and/or practice, outreach and/or knowledge exchange activities, media coverage or other research-related relevant activities.

Note: 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, rather than to the individual output item; the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

FTE

Please state the amount of time to be dedicated to working on this project as a proportion of a full time equivalent (1FTE).

Personal declaration

Briefly describe why you are well-suited to the role of Co-applicant on this application and clearly highlight your specific role on the project. You may refer to your relevant research and analytical expertise and skills as well as your professional skills, such as negotiating and influencing, leadership, networking and collaborative work, cross-disciplinary and/or inter-sectoral work and/or other relevant expertise. The word limit is **250 words**.

5 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.

[18] https://www.hrb.ie/funding/funding-schemes/before-you-apply/how-we-assess-applications/declaration-on-research-assessment/

Submission of Applications

The deadline for submission of complete applications is 19 August 2021 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 III: Resources/Useful Links

1 General

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

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.

Library | The EQUATOR Network (equator-network.org)

2 Clinical research infrastructures/supports

Health Research Board Clinical Research Facility, Cork
http://www.ucc.ie/en/crfc/

Health Research Board Clinical Research Facility, Galway
http://www.nuigalway.ie/hrb_crfg/

Wellcome Trust-Health Research Board Clinical Research Facility, St James's Hospital
http://www.sjhcrf.ie/

Clinical Research Centre, Royal College of Surgeons in Ireland
Clinical Research Centre at RCSI Dublin - Royal College of Surgeons in Ireland

Clinical Research Facility, University College Dublin
http://www.ucd.ie/medicine/ourresearch/researchenvironment/ucdclinicalresearchcentre/

Centre for Advanced Medical Imaging, St James' Hospital Dublin
http://www.3tcentre.com/

Centre for Support and training Analysis and Research (CSTAR)
CSTAR : Home

3 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

OECD Guidelines on Human Biobanks and Genetic Research Databases
http://www.oecd.org/sti/biotech/guidelinesforhumanbiobanksandgeneticresearchdatabaseshbgrds.htm

ISBER Best Practices for Repositories
http://www.isber.org/?page=BPR

Molecular Medicine Ireland Biobanking Guidelines
Molecular Medicine Ireland Guidelines for Standardized Biobanking (tcd.ie)

NCI Best Practices for Biospecimen Resources
http://biospecimens.cancer.gov/practices/

4 Research Priorities & Public Involvement in Research

INVOLVE UK website for resources on Public and Patient Involvement in research
About INVOLVE – INVOLVE

Patient-Centred Outcomes Research Institute (PCORI)
http://www.pcori.org

Public Involvement Impact Assessment Framework
Provides tools to assess the impacts of involving members of the public in their research in individual projects.

http://piiaf.org.uk/

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
About Priority Setting Partnerships | James Lind Alliance (nihr.ac.uk)

5 Use of Animals in Research

Experimental Design Assistant (EDA)

Online tool for design of animal experiments.

https://www.nc3rs.org.uk/experimental-design-assistant-eda

ARRIVE (Animal Research: Reporting of In Vivo Experiments) guidelines
https://www.nc3rs.org.uk/arrive-guidelines

6 Gender 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

7 Data Management and Sharing 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

UK Concordat on Open Research Data (July 2016)
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 data principles FORCE 11
https://www.go-fair.org/fair-principles/

FAIR at the Dutch centre for Life sciences
http://www.dtls.nl/fair-data/fair-data/

"*The 15 data principles for better data stewardship*" HRB workshop 6 December 2017 - Recordings of all the sessions.
www.youtube.com/playlist

Registry of Research Data Repositories
http://www.re3data.org/

Zenodo Data Repository (OpenAIR)

https://zenodo.org/about

https://zenodo.org/