

June 2021 Grant Call Roadshow

18 & 19 May 2021

Agenda

- Introduction – RIE2025 Human Health and Potential (HHP) Domain
- RIE2025 Grant/Award Programmes for Jun 2021 Grant Call
 - Open Fund – Large Collaborative Grant (OF-LCG)
 - Clinician Scientist – Individual Research Grant (CS-IRG)/ New Investigator Grant (CS-IRG-NIG)
 - Open Fund – Individual Research Grant (OF-IRG)/ Young Individual Research Grant (OF-YIRG)
 - Clinical Trial Grant (CTG)
 - Singapore Translational Research Investigator Award (STaR)
 - Clinician Scientist Award (CSA)
 - HPHSR Clinician Scientist Award (HCSA)
 - Clinician Innovator Award (CIA)
 - Transition Award (TA)
 - NMRC Research Training Fellowship (NMRC RTF)
- Grant Call Submission Mode and Deadline
- Changes to Application Templates
- Singapore Clinical Research Institute (SCRI)'s sharing
- National Health Innovation Centre (NHIC)'s grants

RIE2025 Human Health and Potential (HHP) Domain

Expand Mission of RIE Domains

We will build on RIE2020 to expand into areas of strategic importance and emerging areas that will enhance Singapore's competitive advantage, e.g. Smart Nation, climate change, food resilience, air & sea connectivity, human potential, preventive health

Manufacturing,
Trade and
Connectivity



Human Health
and Potential



Urban Solutions
and Sustainability



Smart Nation and
Digital Economy



Expand beyond manufacturing sectors to **trade and connectivity sectors** (e.g. aviation, sea transport, logistics and wholesale trade)

Expand to include **Human Potential**, with a focus on enhancing development during pregnancy and early childhood, supporting learning augmentation and healthy and meaningful longevity

Address new challenges in **sustainability and resilience** e.g. climate change, decarbonisation, healthy cities, and transformation of our Built Environment

Develop technology leadership to **drive our Smart Nation ambition**, anchoring Singapore's position as a **Trusted Digital Innovation Hub**; strengthen capabilities in strategic areas for economic growth and resilience

Framework for RIE2025 Human Health and Potential (HHP) Domain



RIE2025 HHP Vision and Goals

A leading hub that transforms and protects health, advances human potential and creates economic value through excellence in research and its applications for Singapore, Asia and the world

HHP RIE Priorities

Develop world-class RIE capabilities, & ecosystem, and create impact in strategic areas within:

Good healthcare outcomes at sustainable costs
Development & Learning, Function/Performance, Productive Longevity

Population Health, Preventive Health, Epidemic Preparedness & Response
BioMedtech & Digital Health Hub

Pathways & Platforms for Value Creation

1. Development and Productisation e.g. Therapeutics, Diagnostics, Medtech
2. Clinical trial support
3. Industry partnerships
4. Support for Start-ups and scaling
5. Regulatory Leadership
6. Deployment into health system
7. Internationalisation strategy

Smart capital/
Private investments
/other I&E funding sources

Large Collaborative Grants

Industry Alignment Fund

Translational Programmes

Aggregate talent & capabilities and orient them towards translation

Foundational Research Capabilities

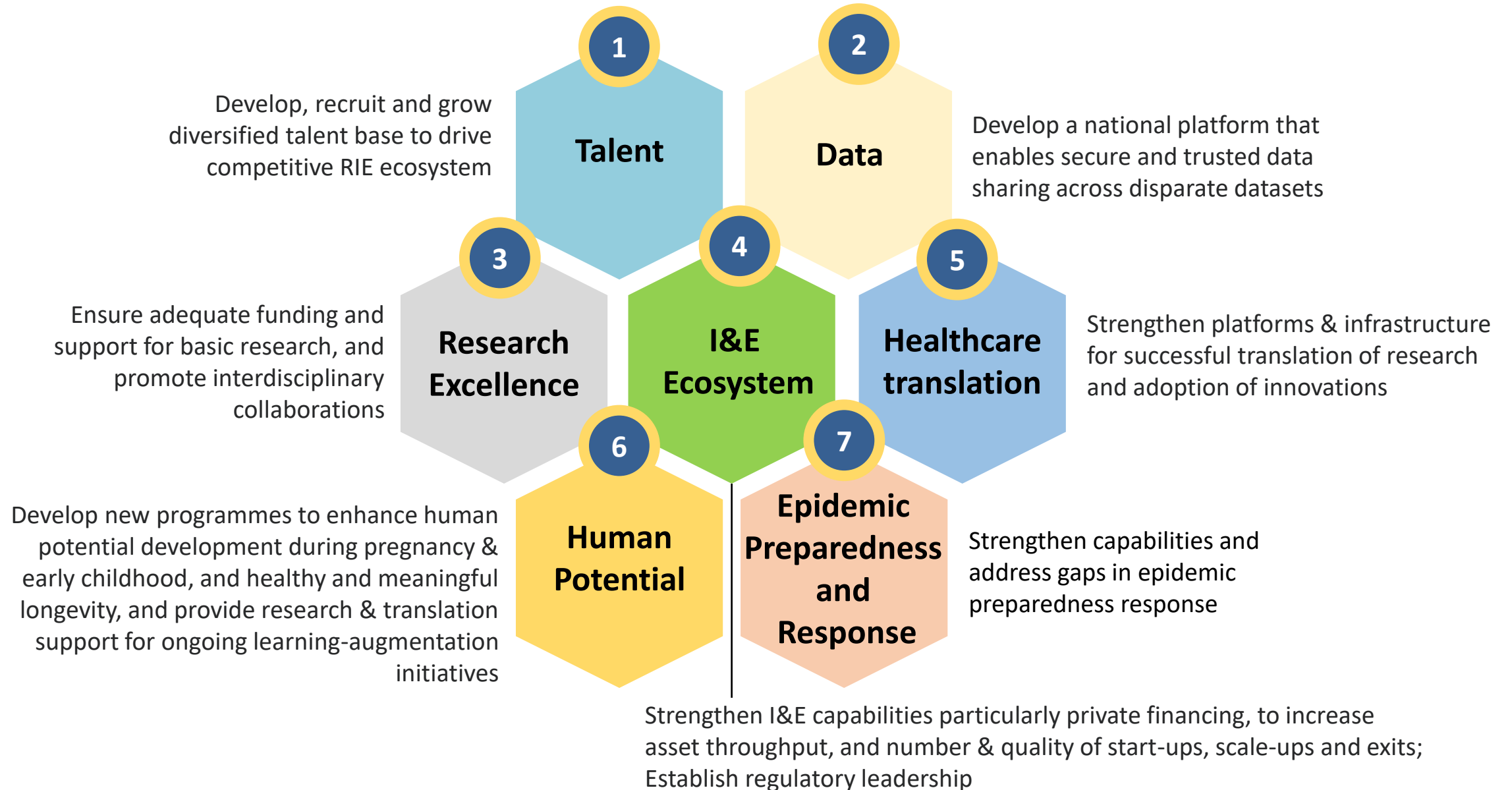
TALENT: Clinician-researchers; BMS; Data & AI scientists; Engineering & Computer sci; Behavioural sci; I&E; Programme Management

DATA: High quality, rich & linkable across different dataset types in trusted manner

BASIC RESEARCH EXPERTISE

RESEARCH INFRASTRUCTURE

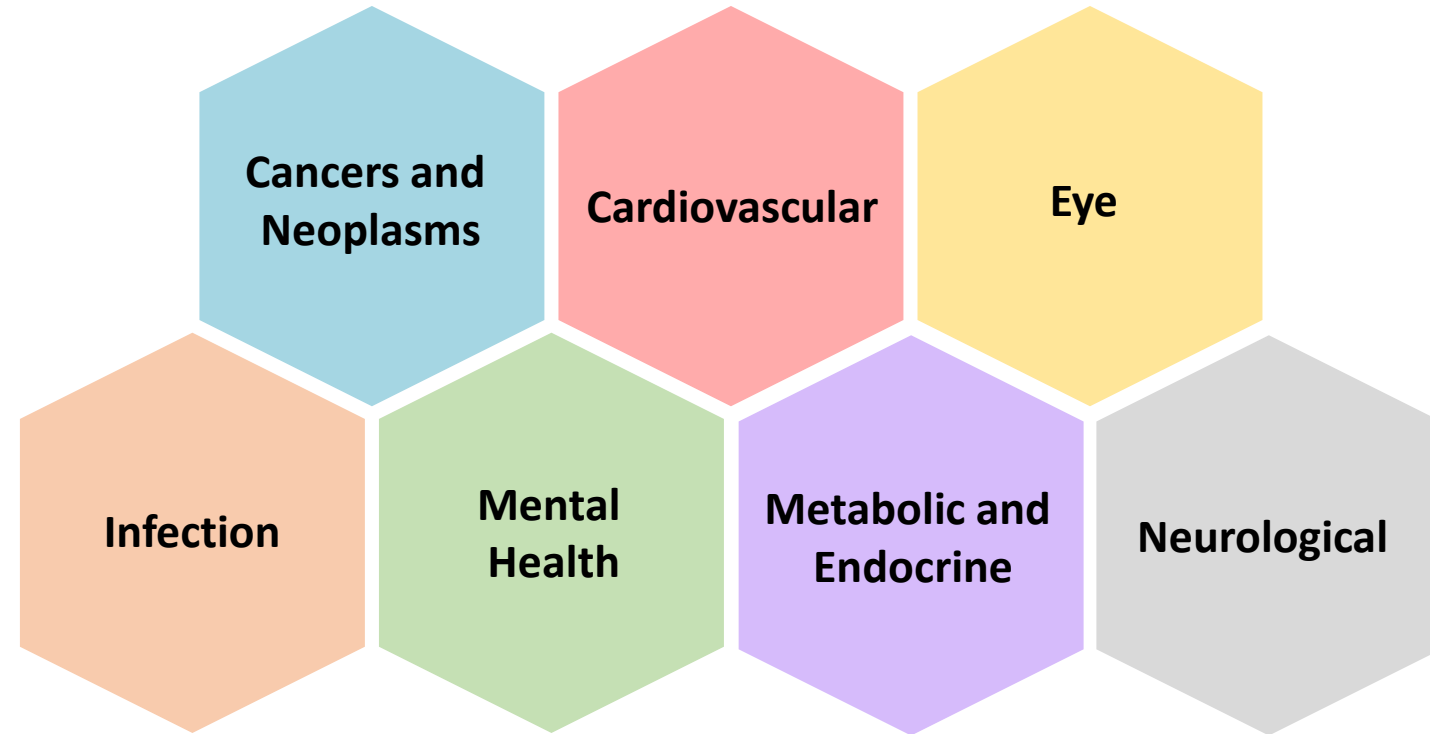
RIE2025 HHP Strategic Thrusts



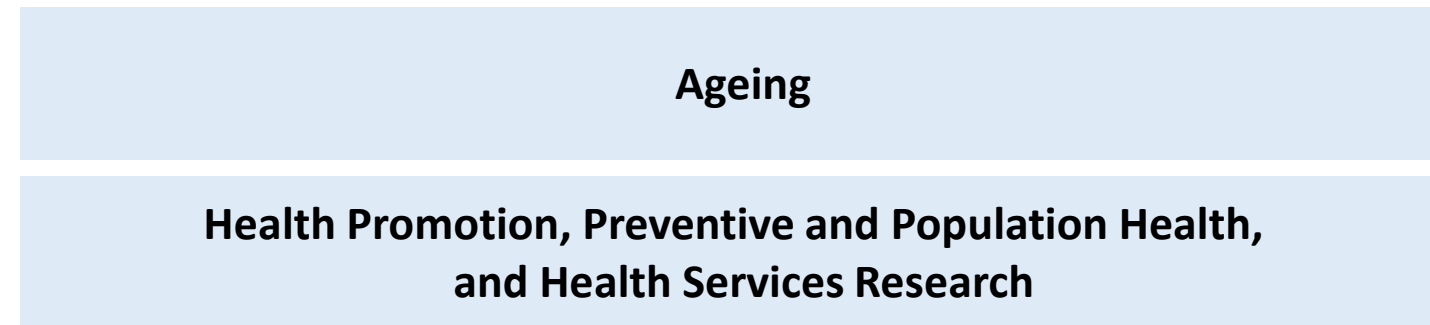
MOH's RIE2025 Areas of Priority for Research

Therapeutic Areas

Nomenclature based on the UK Health Research Classification System (HRCS); identified based on factors such as disease burden in Singapore



Cross-Cutting Areas





RIE2025 Grant Programmes

Open Fund Large Collaborative Grant (OF-LCG)

OF-LCG – Aim

Aim

The Open Fund Large Collaborative Grant (OF-LCG) aims to bring together the best teams from public institutions to advance human health and wellness, as well as create economic value for Singapore and Singaporeans, through the pursuit of excellence in research and its applications. The purpose of the OF-LCG scheme is to support patient-centric translational¹ research, supplemented with basic² and/or applied research³. The scheme will not support pure basic science, pure clinical or pure applied research.

The following categorisation of research activity is based on UK Health Research Classification System (HRCs):

¹ *Translational Research: Prevention, Detection and Diagnosis, Treatment Development and Treatment Evaluation*

² *Basic Research: Underpinning and Aetiology*

³ *Applied Research: Disease Management and Health Services*

OF-LCG – Key Elements

Key Elements

- Interdisciplinary collaboration across institutions is preferred and encouraged so as to integrate, coordinate and leverage on the full spectrum of research capabilities in Singapore, from basic science to clinical research.
- LCG programmes should aim to make significant contributions to the advancement of knowledge in therapeutic areas and help establish Singapore as a global leader in these areas.
- They should facilitate the discovery and application of basic science ideas relevant to the advancement of health, as well as the translation of clinical findings into policy and practice. They should also provide opportunities for international partnerships and/or industry collaborations.
- Pathway(s) to impact should be clearly articulated.

OF-LCG – Priority Research Areas

Priority Research Areas

Application to the OF-LCG scheme will be through open grant calls.

The OF-LCG is open to proposals of the highest quality in all areas, typically involving multi disciplinary teams. To better realise the goals of HHP domain in Singapore, the following seven areas have been identified as national priorities for research.

- Cancers and neoplasms
- Cardiovascular
- Eye
- Infection
- Mental health
- Metabolic and endocrine
- Neurological

June 2021 Grant Call

Open to applications from all seven priority areas. Applications outside the seven priority areas will still be considered.

OF-LCG – Funding Quantum & Duration, Grant Call Frequency

Funding Quantum and Duration

- Tier 1: Funding quantum of up to \$10M per project (inclusive of 30% indirect costs) up to 5 years; and
- Tier 2: Funding quantum of up to \$25M per project (inclusive of 30% indirect costs) up to 5 years.

Grant Call Frequency

Grant calls will be opened once a year.

OF-LCG – Eligibility Criteria

- Only one Corresponding Principal Investigator is allowed per application, and there is no cap placed on the number of Theme PIs per theme. However, a cap of 5 themes applies.
- The Corresponding PI and Theme PIs are required to fulfil the following criteria at the point of application:
 - Holds a primary appointment in a local publicly funded institution and salaried by the institution.
 - Should have PhD or MD/MBBS/BDS qualifications (*exceptions would be made on a case-by-case basis*).
 - Is an independent investigator (with PI status in institution) with a demonstrated track record of research, as evidenced by the award of nationally competitive funding (international funding to be considered on a case by case basis), substantial publication record in the past 3 years.
 - Has a laboratory or clinical research program that carries out research in Singapore
 - Holds a minimum of 9 months employment (per calendar year) with local Singapore institution(s). Upon award, the PI must agree to fulfil at least 6 months of residency in Singapore for each calendar year over the duration of the grant award.
 - Has no outstanding reports from previous BMRC, NMRC grants, and other national grants.
 - For proposals involving patients, the PI should be SMC registered; or should be able to demonstrate ability to access patients through SMC registered Co-Is or collaborators.

NOTES:

1. All Theme PIs share the responsibility in making the programme a success and they form the OF-LCG leadership team essential for implementing programme strategies and achieving desired outcomes. Theme PIs have the responsibility to direct each specific research theme being supported by the grant, and are accountable for the proper conduct of the specific research theme.
2. Among the PIs, there will be one Corresponding PI who will coordinate the OF-LCG programme. He/She serves as the main point of contact between NMRC and the OF-LCG leadership team and is accountable to NMRC for the proper conduct of the whole programme.
3. There is no limit to the number of Co-Is and Collaborators. However, Co-Is must have at least an adjunct position (including visiting professorships) at a local public institution; and investigators from overseas institutions and private companies can only participate as Collaborators. Both Co-Is and Collaborators exclude research staff that will be funded under the grant application.
4. Applicants from CREATE entities and Temasek Lifesciences Laboratory will continue to be eligible to apply.

OF-LCG – Evaluation Criteria

Evaluation Criteria

Selection of successful proposals would be based on the following evaluation criteria:

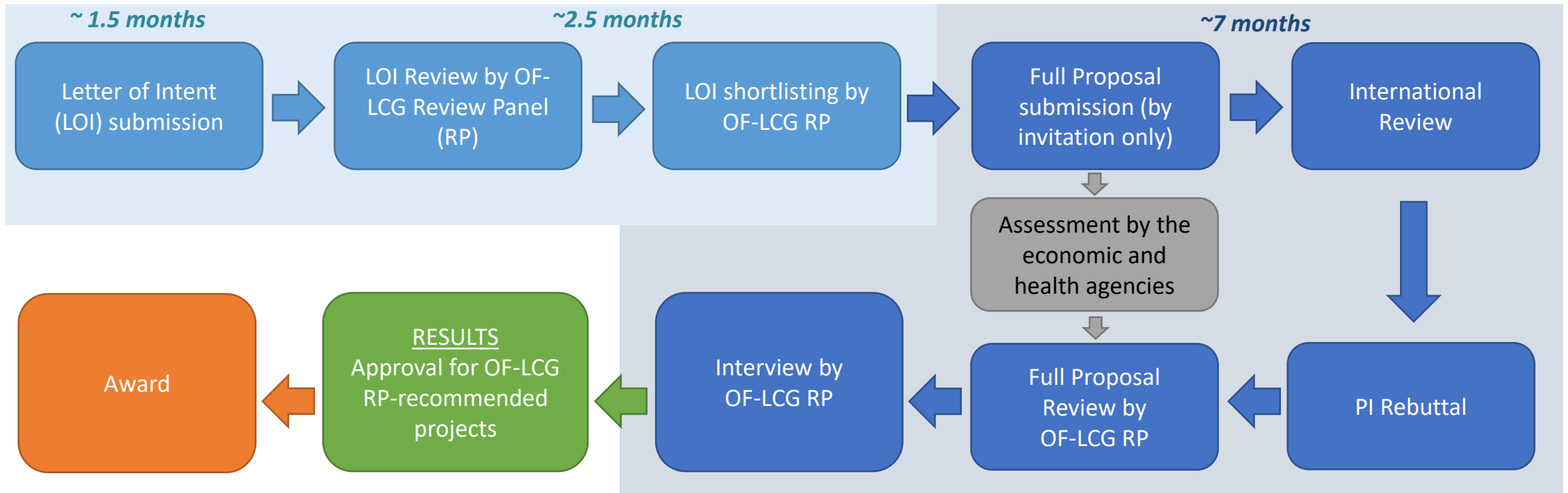
- High-quality scientific research focusing on patient-centric translational research, supplemented with basic and/or applied research (including Health Services Research). Proposed research must be well-differentiated and highly competitive. It should demonstrate a high potential to be world class.
- Proposed research topic should address issues of national importance. These should typically be challenges that no single institution or discipline can solve and require collaborative and interdisciplinary approaches. Provided they are scientifically meritorious, proposals which address the therapeutic areas would be given priority consideration.
- Proposed research team should have established track record and research productivity. Proposed governance to manage the programme should be feasible and sustainable.
- Proposed programme should contribute to capacity development of human capital and research infrastructure.
- Demonstrate the potential to improve health outcomes and capture economic value* with a clear indication of pathway(s) to impact.

**Translation Pathways to Healthcare and Economic Outcomes are required in the application. For economic value, an industry engagement plan will also be required in the application, and applicants are encouraged to obtain letters of support from the industry.*

OF-LCG – Review Process

Review Process

- 2-stage review process comprising a letter of intent (LOI) stage and (only for LOIs shortlisted) a full proposal stage.



Clinician Scientist-Individual
Research Grant (CS-IRG)
Clinician Scientist-Individual
Research Grant-New
Investigator Grant
(CS-IRG-NIG)

CS-IRG

Objective

- The Clinician Scientist – Individual Research Grant (CS-IRG) aims to support Clinician Scientists in carrying out internationally competitive medical research.
- CS-IRG supports basic, clinical and translational research.

Grant call frequency: Twice a year (May and Nov)

Funding Quantum: up to \$1.95M (inclusive of up to 30% indirect costs) for up to 3 years. Projects involving prospective patient/subject recruitment may apply for up to 5 years.

CS-IRG – Eligibility Criteria (1)

- Grant application to be led by a Clinical PI
 - PI must be clinically qualified (i.e. with MD/MBBS/BDS) and preferably with post-graduate clinical training and experience.
- Allied Health Professionals who meet the following conditions may apply:
 - i. Non-medically trained PIs who are nurses, pharmacists or other allied health professions listed on the MOH's website* in clinical practice, doing research in clinical settings or doing research with clinical and healthcare applications/relevance, are eligible to apply.
 - ii. Applicants who are working in human clinical research, including epidemiologists, biostatisticians, and whose research is clinically relevant and has potential health impact, will be considered as exceptions on a case-by-case basis.
 - iii. Non-medically trained applicants conducting wet laboratory based research are not eligible.
 - iv. Applicants must possess a minimum academic qualification of a PhD or the equivalent training.
 - v. Recipients of NMRC Human Capital Awards, Transition Award and NMRC Research Training Fellowship are eligible to apply.

CS-IRG – Eligibility Criteria (2)

MOH List of Allied Health Professionals*:

- Audiologists
- Diagnostic Radiographers
- Dietitians
- Medical Laboratory Technologists
- Medical Social Workers
- Occupational Therapists
- Optometrists & Opticians
- Orthoptists
- Physiotherapists
- Podiatrists
- Prosthetists & Orthotists
- Psychologists
- Radiation Therapists
- Respiratory Therapists
- Speech Therapists

CS-IRG – Eligibility Criteria (3)

- A*STAR CS scholar from the National Science Scholarship (NSS) (MBBS-PhD) or NSS (MD-PhD) schemes and who fulfil the following may apply:
 - i. hold primary appointments in Academic Medical Centres (AMCs), public health institutions (PHIs) or medical schools; or
 - ii. hold primary appointments in A*STAR but (with mutual agreement of A*STAR and the AMC/PHI/medical school) also hold a joint appointment in the AMC/PHI/medical school, provided that any such grant application is supported by the AMC/PHI/medical school. The institution/school should also consider if these A*STAR CS scholars are able to demonstrate that they can act as a bridge between A*STAR and the healthcare system.
 - iii. submit the grant application through AMCs/PHIs/medical schools as host institutions.

CS-IRG – Eligibility Criteria (4)

- For proposals **involving patients**, the clinical PI or co-I should be **SMC registered**; or should be able to demonstrate ability to access patients through SMC registered collaborators.
- For some CS-IRG proposals it is recognized that some studies may be **pre-clinical** and do not require the PI to be SMC registered.
- Only one PI is allowed per application. The number of application by an individual (as PI) is capped at 1 grant application per grant type in a grant call.

CS-IRG – Eligibility Criteria (5)

Additional Eligibility Criteria:

- i. Hold a primary appointment in a local public hospital/public health institutions/national specialty centre/public universities/Academic Medical Centres and salaried by the institution.
- ii. Be an independent PI with a demonstrated track record of research as evidenced by the award of nationally competitive funding (international funding to be considered on a case by case basis) or substantial publication record.
- iii. Have a laboratory or clinical research program that carries out research in Singapore.
- iv. Hold a minimum of 9 months employment with a local Singapore institution. Upon award, the PI must agree to fulfill at least 6 months of residency in Singapore for each calendar year over the duration of the grant award.
- v. No outstanding reports from previous BMRC, NMRC and other national grants

Subcategory CS-IRG-NIG

Objective

- The **CS-IRG New Investigator Grant (CS-IRG-NIG)** is a sub category of the CS-IRG to cater for new clinical investigators.
- Applicants with substantial research experience will not be accepted under this category.

Grant call frequency: Twice a year (May and Nov)

Funding Quantum: up to \$260,000 (inclusive of up to 30% indirect costs) for up to 2 years. Projects involving prospective patient/subject recruitment may apply for up to 3 years.

NIG-specific Eligibility Criteria

- Applicants who are applying under the new investigators category have to work with a **mentor** for guidance in their research. This mentoring will provide support for a period of supervised research leading eventually to the clinical investigators conducting larger scale research projects independently. Please note that the NIG is intended to fund a new investigator's independent project, and not to provide additional funding for the mentor's project (or clinical trial).
- To be eligible for NIGs in general, the following requirements apply:
 - i. Awardees of the following grants as PI/Co-PI* at the point of application will not be eligible for the NIG: A*STAR Investigatorship, NRF Fellowship, NMRC CSA and STaR, MOE Tier 2 and 3 grants, MOH/NMRC IRG-equivalent grants^.
 - ii. Applicant should not have held more than 1 NMRC OF-YIRG or NIG award at the time of application
 - iii. Applicant must not have received funding to conduct their own research project as PI which cumulatively exceed \$500,000. This can be funding from any sources.

**Co-PIs refer to PIs whose projects are jointly led by other PIs (e.g. projects under NMRC's Bedside & Bench grant). They are not the same as, and should not be confused with Co-Investigators (Co-Is).*

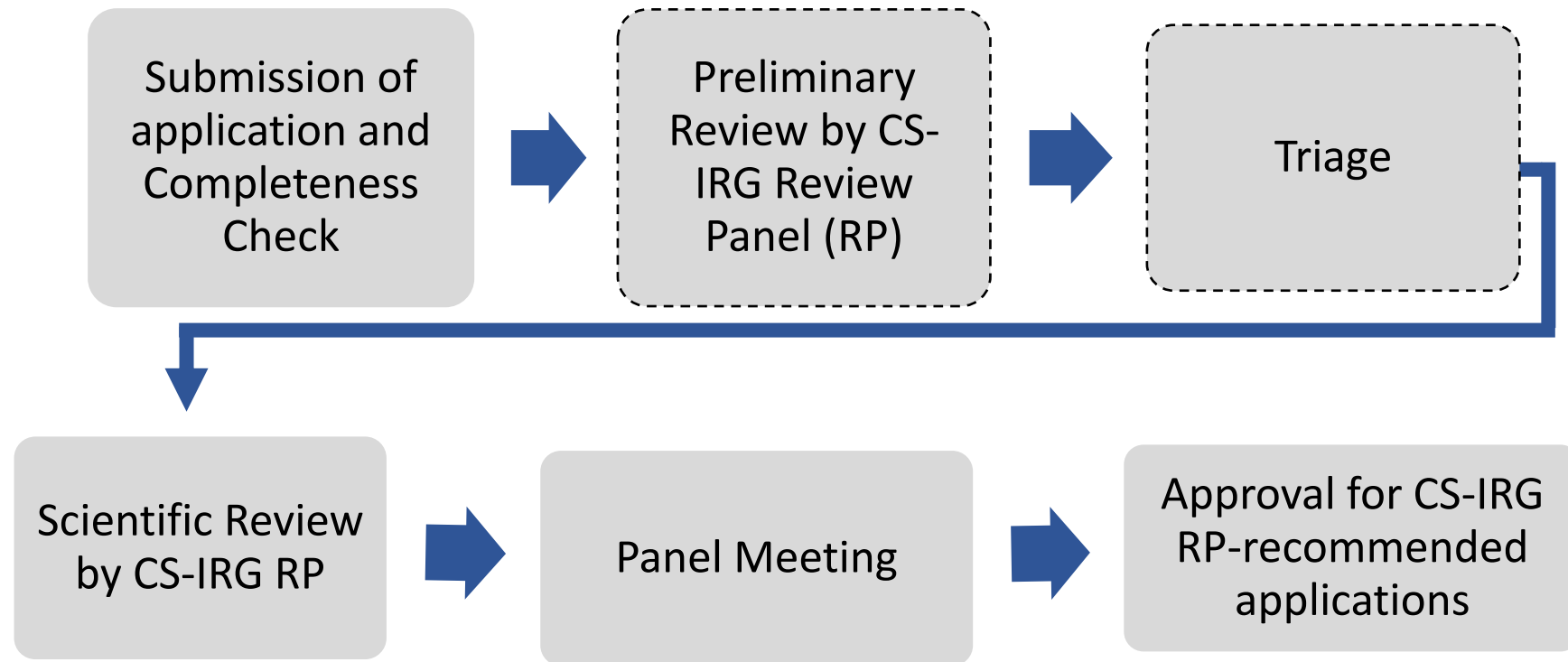
^NIC Ageing Grants (with the exception of Health and Longevity Catalyst Awards) are considered IRG-equivalent grants.

CS-IRG/CS-IRG-NIG – Research Themes

- Open to applications in all research areas
- Applications are assessed based on scientific merit at the international level and relevance to Singapore, but should prioritisation be required between meritorious applications, the following seven disease areas have been identified as national priorities for research:
 - Cancers and neoplasms
 - Cardiovascular
 - Eye
 - Infection
 - Mental health
 - Metabolic and endocrine
 - Neurological

CS-IRG/CS-IRG-NIG – Pilot Review Process

Estimated Duration for Review Process: 4 to 5 months



----- Preliminary review and triage will be included if the application volume is high, subject to the decision by the review panel.

Note: The single-stage review process will be piloted on the CS-IRG/CS-IRG-NIG in the June and November 2021 grant calls. After the pilot, the NMRC will review the review process for implementation for future grant calls.

CS-IRG/CS-IRG-NIG – Assessment Criteria

| | CS-IRG | CS-IRG-NIG |
|---------------------|--|--|
| Assessment Criteria | <ul style="list-style-type: none">• Scientific excellence• Feasibility of study in local context• Productivity• Overall impact in local context• Track record of investigators | <ul style="list-style-type: none">• Scientific excellence• Feasibility of study in local context• Productivity• Overall impact in local context• Suitability of applicant to be an independent investigator and to assume the role of a PI |

Open Fund Individual Research
Grant (OF-IRG)

Open Fund Young Individual
Research Grant (OF-YIRG)

OF-IRG

OF-IRG is provided to support the conduct of research proposals in basic, translational and clinical research that are relevant to human health and potential, including research that looks at the causes, consequences, diagnosis and treatment of human diseases.

Grant call frequency: Twice a year (May and Nov)

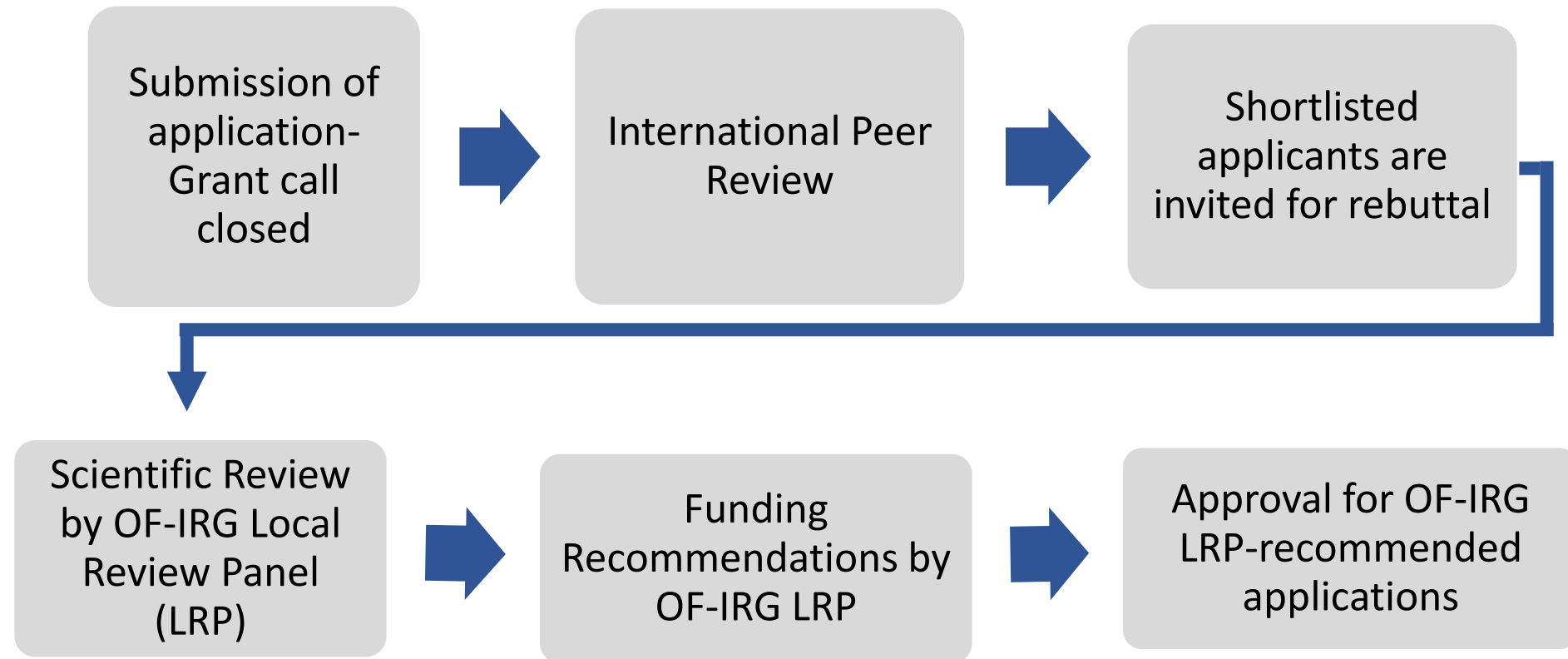
Funding Quantum: up to \$1.625M (inclusive of up to 30% indirect costs) for up to 5 years

OF-IRG – Eligibility Criteria

- Only one Principal Investigator (PI) is allowed per application. The number of application by an individual (as PI) is capped at 1 grant application per grant type in a grant call.
- Applicant applying as **Principal Investigator** is required to fulfil the following criteria at the point of application:
 - a) Holds a primary appointment in a local publicly funded institution and salaried by the institution.
 - b) PIs should have PhD or MD/MBBS/BDS qualifications. (*Exceptions would be made on a case-by-case basis*).
 - c) Is an independent investigator (with PI status in institution) with a demonstrated track record of research, as evidenced by the award of nationally competitive funding (international funding to be considered on a case by case basis), substantial publication record in the past 3 years.
 - d) Has a laboratory or clinical research program that carries out research in Singapore
 - e) Holds a minimum of 9 months employment (per calendar year) with local Singapore institution(s). Upon award, the PI must agree to fulfil at least 6 months of residency in Singapore for each calendar year over the duration of the grant award.
 - f) Has no outstanding reports from previous BMRC, NMRC grants, and other national grants.
 - g) For proposals involving patients, the PI should be SMC registered; or should be able to demonstrate ability to access patients through SMC registered Co-Is or collaborators.

OF-IRG – Review Process

Estimated Duration for Review Process: 5 to 6 months



Subcategory OF-YIRG

- Sub-category of IRG
- Young IRG is a step for the new investigator to a first independent national level grant.
- Investigators with substantial research experience will not be accepted under this subcategory

Grant call frequency: Twice a year (May and Nov)

Funding Quantum: up to \$0.325M (Inclusive of up to 30% indirect costs) for up to 3 years

OF-YIRG – Eligibility Criteria

- Only one Principal Investigator (PI) is allowed per application. The number of application by an individual (as PI) is capped at 1 grant application per grant type in a grant call.
- Applicant applying as **Principal Investigator** is required to fulfil the following criteria at the point of application:
 - a) Holds a primary appointment in a local publicly funded institution **and salaried by institution from time of award.**
 - b) PIs should have PhD or MD/MBBS/BDS qualifications (*Exceptions would be made on a case-by-case basis*).
 - c) Has a laboratory or clinical research program that carries out research in Singapore
 - d) Holds a minimum of 9 months employment (per calendar year) with local Singapore institution(s). Upon award, the PI must agree to fulfil at least 6 months of residency in Singapore for each calendar year over the duration of the grant award.
 - e) For proposals involving patients, the PI should be SMC registered; or should be able to demonstrate ability to access patients through SMC registered Co-Is or collaborators.

OF-YIRG – Additional Eligibility Criteria (1)

- a) Applicants who are applying for the Young IRGs are strongly encouraged to work with a mentor for guidance in their research. This mentoring will provide support for a period of supervised research leading eventually to the investigators conducting larger scale research projects independently.
- b) Applicants must have completed their PhD or MBBS/MD/BDS within the past 7 years and past 10 years respectively (whichever date is later).
- c) Applicants must not have received external competitive funding exceeding \$500,000 (direct costs only) within the last 5 years to conduct their own research project as the PI.
- d) Awardees of the following grants will not be eligible for YIRG:
 - A*STAR Investigatorship
 - NRF Fellowship
 - MOE Tier 2 and 3 grants
 - MOH/NMRC IRG-equivalent grants*

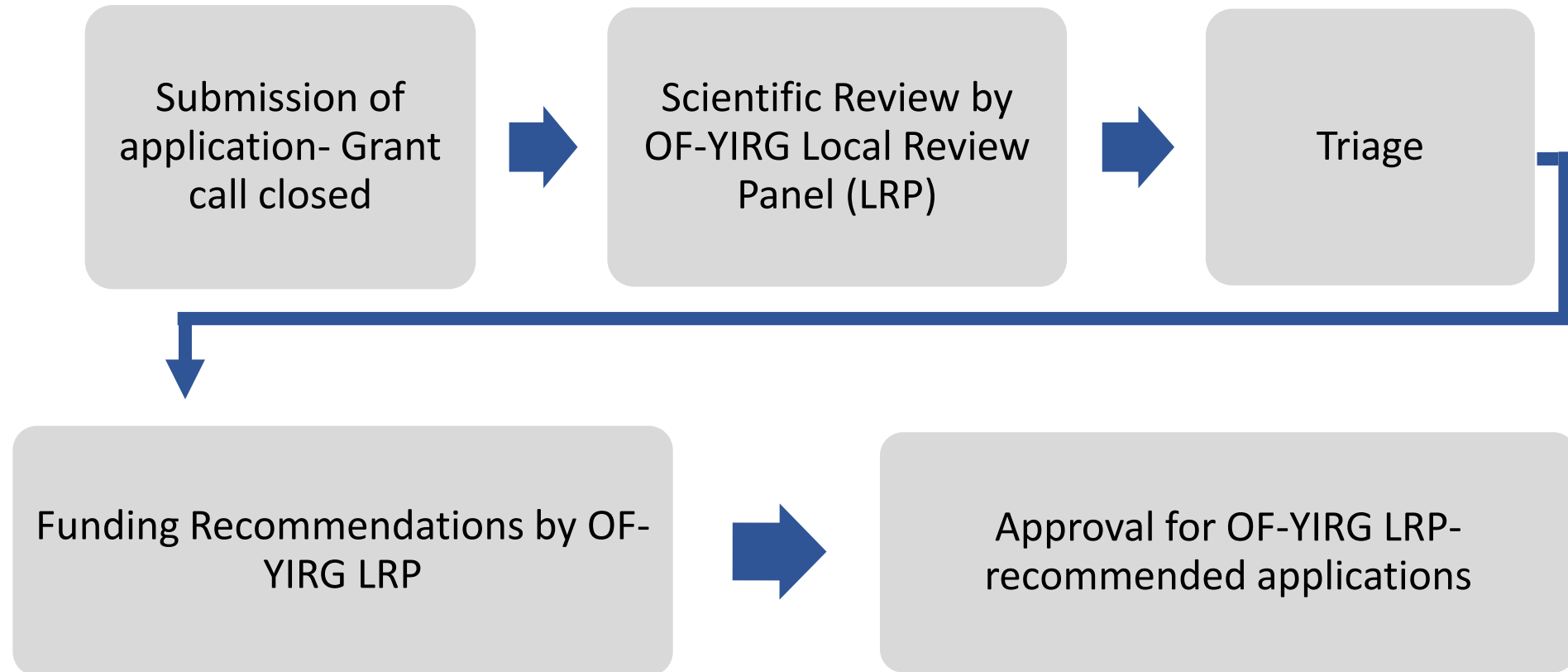
**NIC Ageing Grants (with the exception of Health and Longevity Catalyst Awards) are considered IRG-equivalent grants.*

OF-YIRG – Additional Eligibility Criteria (2)

- e) Applicants must indicate how the proposed area of work would be distinct from their current supervisor's existing research. The applicant's current supervisor should not be a co-investigator on the proposal.
- f) Upon the award of the OF-YIRG, the host institution will be required to provide written confirmation from either the applicant's Head of Institution or supervisor to describe the steps the institution will take to demonstrate its commitment to his/her career development. This must include provision of appropriate space to carry out the work proposed, but may also include investment in the equipment necessary to establish the laboratory, access to shared institutional resource, and career development support etc.

OF-YIRG – Review Process

Estimated Duration for Review Process: 4 to 5 months



OF-IRG/OF-YIRG – Research Themes

- Open to applications in all research areas
- Applications are assessed based on scientific merit at the international level and relevance to Singapore, but should prioritisation be required between meritorious applications, the following seven disease areas have been identified as national priorities for research :
 - Cancers and neoplasms
 - Cardiovascular
 - Eye
 - Infection
 - Mental health
 - Metabolic and endocrine
 - Neurological

OF-IRG/OF-YIRG – Evaluation Criteria

- Quality of the science
- Capability of the research performers to conduct the research
- Objectives of the research program in context of HHP goals*

** The HHP Domain's vision for RIE2025 is to be a leading hub that transforms and protects health, advances human potential and creates economic value through excellence in research and its application for Singapore, Asia and the world.*

Clinical Trial Grant (CTG)

Clinical Trial Grant (CTG)

Objective

- To support clinicians to carry out clinical trials for the development of novel therapies, interventions and diagnostics, focusing on healthcare needs

Two Schemes

- CTG-Industry Collaborative Trials (CTG-ICT)
(Open whole year)
- CTG-Investigator-Initiated Trials (CTG-IIT)
(Twice a year; May and Nov)

CTG-ICT Scheme

- Supports ICTs that involve both clinician and company contributing intellectual inputs and funds to conduct the trial and developing novel or pre-existing therapies/drugs/medical device for new indications.
- **This scheme does not support trials that are fully funded/sponsored by companies.** Such trials typically do not require the clinicians' intellectual inputs as the clinical trial protocol has already been designed by the company, and the clinicians' involvement is more for subject/patient recruitment.
- Industry partner required
- At least 70% of total project costs (cash or in-kind) contributed by industry partner
- Submit RCA showing budget
 - *Only industry contribution incurred in SG will be considered as admissible*
 - *Admissible in-kind drug cost contribution by companies is limited to equivalent to non-drug cost contribution (next slide)*
- Funding quantum capped at \$4.94M per project (inclusive of up to 30% indirect costs) for up to 5 years

*Admissible industry in-kind drug cost contribution

- Admissible in-kind drug cost contribution from companies is capped at the amount of non-drug cost contribution from the companies
- Example

| Line items | Industry contribution (cash and in-kind) (\$ in mil) | <u>Admissible</u> industry contribution# (cash and in-kind) (\$ in mil) |
|--------------------|--|--|
| EOM | 1 | 1 |
| EQPT | 0.5 | 0.5 |
| OOE Consumables | 0.5 | 0.5 |
| Subtotal | 2 | 2 |
| OOE Drugs | 10 | 2* |
| Total | 12 | 4 |

* Admissible in-kind drug cost contribution = \$2mil capped at subtotal (sum of EOM, EQPT and OOE (consumables))

#Cost is admissible only if they are incurred in Singapore

CTG-IIT Scheme

- Support IITs of both early- and late-phase which are initiated and driven by clinicians who are interested to conduct trials on novel or pre-existing drugs/medical device/interventions for new indications.
- Collaboration with industry partner is optional.
- No requirement for minimum company contribution, however applications with industry contribution would have higher priority.
- Funding quantum capped at \$1.625M per project (inclusive of up to 30% indirect costs) for up to 5 years.

CTG – Eligibility Criteria (1)

- Each grant application must be submitted by a **Clinical Principal Investigator** who has to fulfil the eligibility criteria listed below at the point of application. Only one Principal Investigator (PI) is allowed per application.
- Must be **clinically qualified** (i.e. with MD/MBBS/BDS) and preferably with **post-graduate** clinical training and experience.
- Must **fulfill HSA's requirements** for PIs who are conducting clinical trials. Please refer to HSA website for detailed guidelines on conducting clinical trials:

<https://www.hsa.gov.sg/clinical-trials>


CTG – Eligibility Criteria (2)

- Must hold a primary appointment in a local public hospitals/public health institutions/ national specialty centres/public universities/Academic Medical Centres and salaried by the institution.
- Must be an independent PI with a demonstrated track record of research as evidenced by the award of nationally competitive funding (international funding to be considered on a case-by-case basis), or substantial publication record.
- Have a laboratory or clinical research program that carries out research in Singapore.
- Hold a minimum of 9 months employment with the a local institution, and fulfil full time residency in Singapore over a period of the calendar year.
- No outstanding reports from previous BMRC, NMRC grants and other national grants.

CTG – Research Themes

- Open to applications in all research areas
- Applications are assessed based on scientific merit at the international level and relevance to Singapore, but should prioritisation be required between meritorious applications, the following seven disease areas have been identified as national priorities for research :
 - Cancers and neoplasms
 - Cardiovascular
 - Eye
 - Infection
 - Mental health
 - Metabolic and endocrine
 - Neurological
- Additional identified priority areas for clinical trials are as follows:
 - Small regional network-based trials led by Singapore KOLs, particularly for rare diseases and Asian prevalent diseases of high priority healthcare challenges to Singapore
 - Early phase clinical trials of high value to build on strong translational expertise (particularly in oncology and cardiology)
 - Clinical pharmacological clinical trials focusing on aging population
 - Precision medicine
 - Digital health technologies
 - Clinical trials using real-world data and evidence and well characterised and pre-consented patient cohorts

CTG – Application Info

| CTG-Industry Collaborative Trials (CTG-ICT) | CTG-Investigator Initiated Trials (CTG-IIT) |
|--|---|
| <ul style="list-style-type: none"> Included a Letter of Intent stage <div style="text-align: center; margin-top: 20px;"> <p>LOI</p>  <p>Shortlist</p> <p>Full Proposal Submission</p> </div> | <ul style="list-style-type: none"> Applications to be accompanied with: <ol style="list-style-type: none"> A letter of support from HI and PI's Head of Department to show commitment to adopt IIT outcome with the following caveats: <ol style="list-style-type: none"> If IIT outcome is positive If there are no other competing and/or better solutions than IIT outcome If IIT outcome is worthy of implementing based on analysis on cost effectiveness and other necessary analyses needed In kind support from HI (could include EOM/OOE/EQPT support from grants received by HI e.g. NMRC Centre Grant, Clinical Research Coordinator Funding Award, or internal funds) |

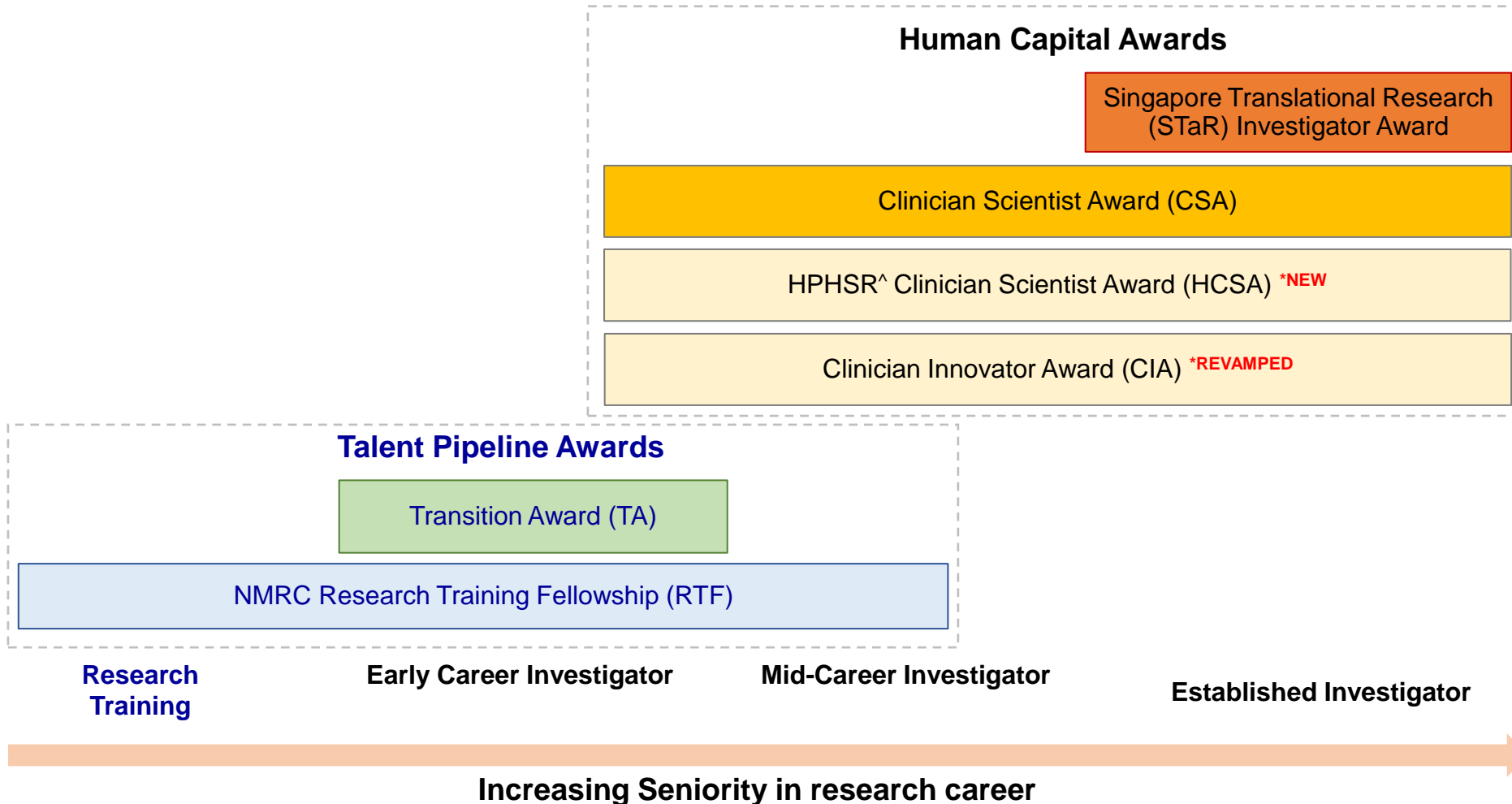
CTG – Assessment Criteria

- a) Scientific merit of proposal
- b) Feasibility of study in local context
- c) Track record of applicants
- d) Overall impact in local context
- e) Scientific/health outcomes and relevance to HHP strategy (eg. national priority areas, national clinical trials strategy)
- f) Economic outcomes:
 - i. Attract a range of companies including large pharmaceutical companies, medical device and biotech SMEs, and encourage them to extend their investment and deepen partnerships with public healthcare institutions. It will also help to groom local companies which are bringing new medical products or therapies into market.
 - ii. Develop next generation of KOLs, deepening expertise in key therapeutic areas to further attract industry investments.
 - iii. Potential for economic impact, value creation and value capture for industries in Singapore.

RIE2025 Human Capital Awards & Talent Development Programmes

RIE2025 NMRC Talent Programmes

NMRC administers a range of human capital awards and talent development programmes aimed at supporting individuals in their research and career progression.



Areas of Research

The Human Capital Awards and Talent Development Programmes are open to applications on all research areas.

Applicants focusing on the translation of research and innovations into healthcare in the following strategic areas (covering both expertise in technology as well as use case areas) will be prioritised:

- Medical Technology (MedTech), Artificial Intelligence (AI), Data Science and Digital Health
- Epidemiology, Population Health and Implementation Science
- Precision Medicine
- Healthy and Productive Longevity
- Family Medicine and Primary Care

Singapore Translational Research (STaR) Investigator Award

STaR Investigator Award (1)

Objective

- A prestigious award offered by the MOH to recognise and support internationally renowned and outstanding investigators in Translational and Clinical Research (TCR), Health Promotion, Preventive Health, Population Health and Health Services Research (HPHSR), and/or Health Technology.

Funding Quantum

- **First Award: S\$6mil over 5 years ; Renewals S\$4mil over 5 years**
 - PI's salary support up to S\$600k per annum
 - Grant support and 30% indirect costs will be adjusted accordingly

** Institutions are encouraged to co-fund; Applications with co-funding would be considered favourably during review.*

Grant Call Frequency

- Twice a year
- Opening dates: Typically in **May** and **November**

STaR Investigator Award (2)

Eligibility Criteria

- 1) Applicants should have a **strong track record of scientific achievement, conduct cutting edge translational and clinical research (TCR) or research in Health Promotion, Preventive Health, Population Health, Health Services Research (HPHSR) or Health Technology, and produce outstanding research output with clinical and health impact.**
- 2) Applicants should hold a **clinical qualification (e.g. MBBS, MD, BDS or equivalent)** with recognised specialty training beyond medical or dental school (including specialists, family physicians and public health practitioners).^{i, ii}
- 3) Applicants who are health science / healthcare professionals with non-medical degrees, such as nurses, pharmacists and other allied health professions listed on MOH's website*, and possess PhD or equivalent qualifications are eligible to apply. Those without PhD or equivalent qualifications, but possess relevant research track record can be considered for award on case-by-case basis.
- 4) Applicants working in human clinical research, including epidemiologists and biostatisticians, and whose research is clinically relevant and has potential health impact, will be considered as exceptions on a case-by-case basis.ⁱⁱⁱ
- 5) All applicants must be doing research in clinical settings or doing research with clinical and healthcare applications/relevance.
- 6) Applicants with non-medical degrees conducting laboratory based research are not eligible.

Notes:

- i. Recipients of NMRC Human Capital Awards (i.e., STaR, CSA, HCSA, CIA/CIDA) and Transition Award are exempted.
- ii. Clinicians with recognised specialty training are:
 - a. Clinicians who are accredited by the MOH Specialists Accreditation Board (SAB), Dental Specialists Accreditation Board (DSAB) and Family Physicians Accreditation Board (FPAB).
 - b. Clinicians who do not fulfil the above but are able to demonstrate completion of specialist training in countries which do not have specialist boards/colleges and are holding consultant positions as a specialist may be considered on a case-by-case basis.
- iii. Applicants who are submitting on an exception basis are to submit their CV (with track records including publication records and grants held as PIs/Co-PIs in the past 5 years) to the Secretariat to determine their eligibility prior to submitting a full proposal.

STaR Investigator Award (3)

Eligibility Criteria (con't)

- 7) Applicant must hold the following appointments:
 - a) A primary appointment in a local public hospital/public health institutions/national specialty centre/public university/Academic Medical Centre (AMC) and be salaried by the institution;^{iv} and
 - b) A regular-rank faculty/academic appointment in one of the AMCs or medical schools **within 3 months of award conveyance.**^v
- 8) Applicant must agree to fulfil at least 9 months of residency in Singapore for each calendar year over the duration of the grant award (Host Institution must provide a letter, to commit that the STaR applicant will spend at least 75% of their time in Singapore upon award).
- 9) Applicant must generally **not be beyond the retirement age** at the point of first award.ⁱ
- 10) All research must be conducted in Singapore at a public research institute, hospital/centre or medical school.
- 11) Applicant should not have outstanding reports from NMRC grants and other national grants.
- 12) Applicant may only submit one application to the human capital/talent awards (i.e. STaR, CSA, HCSA, CIA and TA) for each round of grant call.
- 13) Applicant is only allowed up to 2 resubmissions following an unsuccessful first submission.

Notes:

- iv. A*STAR CS scholar from the National Science Scholarship (NSS) (MBBS-PhD) or NSS (MD-PhD) schemes and fulfil the following may apply:
 - a. hold a primary appointment in a public health institution (PHI), Academic Medical Centre (AMC), or medical school; or
 - b. hold a primary appointment in A*STAR and a joint appointment in the PHI/AMC/medical school, and the grant application is supported by the PHI/AMC/medical school. The PHI/AMC/medical school is to consider if the applicant is able to demonstrate that he/she can act as a bridge between A*STAR and the healthcare system.

The grant application must be submitted through the PHI/AMC/medical school as the host institution.
- v. An applicant without regular-rank faculty/academic appointment pledged by the AMC/medical school can be considered, if the PHI demonstrates that there is existing framework and governance that allow sustained research career / opportunities available to the applicant, as well as the availability of a conducive and facilitation structure where high quality research can be undertaken.

STaR Investigator Award (4)

Review Process

- **Two-stage** review process comprising an **international peer review stage** followed by a **collective review** by STaR Panel.
- Applicants may be invited for interview by the STaR panel.
- The review process will take about 6 months after the application closes.

Assessment Criteria

- Track Record of PI will be the highest priority
- Scientific excellence and potential outcomes in the respective areas
- Feasibility of study in local context
- Productivity
- Overall Impact in local context

Clinician Scientist Award (CSA)

Clinician Scientist Award (1)

Objective

- To provide salary & funding support for selected outstanding clinician scientists, to enable them to carry out internationally competitive translational and clinical research, to bring bench discoveries to bedside applications.
- 2 categories of award:
 - Investigator level (INV)*
 - Senior Investigator level (SI)

**One renewal allowed*

Funding Quantum

- 0.5 FTE to 0.7 FTE salary support of actual research time, subject to NMRC annual salary cap
- Grant support of up to:
 - **S\$675k over 3 years** (INV category)
 - **S\$1.75mil over 5 years** (SI category)
- 30% indirect costs

Grant Call Frequency

- Twice a year
- Opening dates: Typically in **May** and **November**

Clinician Scientist Award (2)

Eligibility Criteria

- 1) Applicants should hold a **clinical qualification (e.g. MBBS, MD, BDS or equivalent), with specialty training beyond medical or dental school** (including specialists, family physicians and public health practitioners).^{i, ii}
- 2) Applicants who are health science / healthcare professionals with non-medical degrees, such as nurses, pharmacists and other allied health professions listed on MOH's website* in clinical practice, possess PhD or equivalent qualifications are eligible to apply. Those without PhD or equivalent qualifications, but possess relevant research track record can be considered for award on case-by-case basis.
- 3) Applicants working in human clinical research, including epidemiologists and biostatisticians, and whose research is clinically relevant and has potential health impact, will be considered as exceptions on a case-by-case basis.ⁱⁱⁱ
- 4) All applicants must be doing research in clinical settings or doing research with clinical and healthcare applications/relevance.
- 5) Applicants with non-medical degrees conducting laboratory based research are not eligible.
- 6) Applicants must have been an independent PI on at least one national or international peer-reviewed research grant, equivalent to an Individual Research Grant (IRG)-level grant.

Notes:

- i. Recipients of NMRC Human Capital Awards (i.e., STaR, CSA, HCSA, CIA/CIDA) and Transition Award are exempted.
- ii. Clinicians with recognised specialty training are:
 - a. Clinicians who are accredited by the MOH Specialists Accreditation Board (SAB), Dental Specialists Accreditation Board (DSAB) and Family Physicians Accreditation Board (FPAB).
 - b. Clinicians who do not fulfil the above but are able to demonstrate completion of specialist training in countries which do not have specialist boards/colleges and are holding consultant positions as a specialist may be considered on a case-by-case basis.
- iii. Applicants who are submitting on an exception basis are to submit their CV (with track records including publication records and grants held as PIs/Co-PIs in the past 5 years) to the Secretariat to determine their eligibility prior to submitting a full proposal.

Clinician Scientist Award (3)

Eligibility Criteria (con't)

- 7) Applicant must hold the following appointments:
 - a) A primary appointment in a local public hospital/public health institutions/national specialty centre/public university/Academic Medical Centre (AMC) and be salaried by the institution;^{iv} and
 - b) A regular-rank faculty/academic appointment in one of the AMCs or medical schools **within 3 months of award conveyance.**^v
- 8) Applicant must be a Singapore citizen or Permanent Resident **at the point of application.**
- 9) Applicant must generally **not be beyond the retirement age** at the point of first award.[‡]
- 10) All research must be conducted in Singapore at a public research institute, hospital/centre or medical school.
- 11) Applicant should not have outstanding reports from NMRC grants and other national grants.
- 12) Applicant may only submit one application to the human capital/talent awards (i.e. STaR, CSA, HCSA, CIA and TA) for each round of grant call.
- 13) Applicant is only allowed up to 2 resubmissions following an unsuccessful first submission.

Notes:

- iv. A*STAR CS scholar from the National Science Scholarship (NSS) (MBBS-PhD) or NSS (MD-PhD) schemes and fulfil the following may apply:
 - a. hold a primary appointment in a public health institution (PHI), Academic Medical Centre (AMC), or medical school; or
 - b. hold a primary appointment in A*STAR and a joint appointment in the PHI/AMC/medical school, and the grant application is supported by the PHI/AMC/medical school. The PHI/AMC/medical school is to consider if the applicant is able to demonstrate that he/she can act as a bridge between A*STAR and the healthcare system.

The grant application must be submitted through the PHI/AMC/medical school as the host institution.
- v. An applicant without regular-rank faculty/academic appointment pledged by the AMC/medical school can be considered, if the PHI demonstrates that there is existing framework and governance that allow sustained research career / opportunities available to the applicant, as well as the availability of a conducive and facilitation structure where high quality research can be undertaken.

Clinician Scientist Award (4)

Review Process

- **Two-stage** review process comprising an **international peer review stage** followed by a **collective review** by the local CSA panel.
- Applicants may be invited for interview by the local CSA panel.
- The review process will take about 6 months after the application closes.

Assessment Criteria

- Track Record of PI will be the highest priority
- Scientific excellence and the potential to bring bench discoveries to bedside applications
- Feasibility of study in local context
- Productivity
- Overall Impact in local context

HPHSR Clinician Scientist Award (HCSA)

HPHSR Clinician Scientist Award (1)

Objective

- To provide salary & funding support for selected outstanding clinician scientists, to undertake research in the areas of Health Promotion (HP), Preventive Health, Population Health (PH) and Health Services Research (HSR), bringing about significant and sustainable impact to health outcomes of the nation.
- 2 categories of award:
 - Investigator level (INV)*
 - Senior Investigator level (SI)

**One renewal allowed*

Funding Quantum

- 0.5 FTE to 0.7 FTE salary support of actual research time, subject to NMRC annual salary cap
- Grant support of up to:
 - **S\$500k over 3 years** (INV category)
 - **S\$1.3mil over 5 years** (SI category)
- 30% indirect costs

Grant Call Frequency

- Twice a year
- Opening dates: Typically in **May** and **November**

HPHSR Clinician Scientist Award (2)

Eligibility Criteria

- 1) Applicants should hold a **clinical qualification (e.g. MBBS, MD, BDS or equivalent), with specialty training beyond medical or dental school** (including specialists, family physicians and public health practitioners).^{i, ii}
- 2) Applicants who are health science / healthcare professionals with non-medical degrees, such as nurses, pharmacists and other allied health professions listed on MOH's website* in clinical practice, possess PhD or equivalent qualifications are eligible to apply. Those without PhD or equivalent qualifications, but possess relevant research track record can be considered for award on case-by-case basis.
- 3) Applicants working in human clinical research, including epidemiologists and biostatisticians, and whose research is clinically relevant and has potential health impact, will be considered as exceptions on a case-by-case basis.ⁱⁱⁱ
- 4) All applicants must be doing research in clinical settings or doing research with clinical and healthcare applications/relevance.
- 5) Applicants with non-medical degrees conducting laboratory based research are not eligible.
- 6) Applicants must have been an independent PI on at least one national or international peer-reviewed research grant, equivalent to an Health Services Research Grant (HSRG)-level grant.

Notes:

- i. *Recipients of NMRC Human Capital Awards (i.e., STaR, CSA, HCSA, CIA/CIDA) and Transition Award are exempted.*
- ii. *Clinicians with recognised specialty training are:*
 - a. *Clinicians who are accredited by the MOH Specialists Accreditation Board (SAB), Dental Specialists Accreditation Board (DSAB) and Family Physicians Accreditation Board (FPAB).*
 - b. *Clinicians who do not fulfil the above but are able to demonstrate completion of specialist training in countries which do not have specialist boards/colleges and are holding consultant positions as a specialist may be considered on a case-by-case basis.*
- iii. *Applicants who are submitting on an exception basis are to submit their CV (with track records including publication records and grants held as PIs/Co-PIs in the past 5 years) to the Secretariat to determine their eligibility prior to submitting a full proposal.*

HPHSR Clinician Scientist Award (3)

Eligibility Criteria (con't)

- 7) Applicant must hold the following appointments:
 - a) A primary appointment in a local public hospital/public health institutions/national specialty centre/public university/Academic Medical Centre (AMC) and be salaried by the institution;^{iv} and
 - b) A regular-rank faculty/academic appointment in one of the AMCs or medical schools **within 3 months of award conveyance.**^v
- 8) Applicant must be a Singapore citizen or Permanent Resident **at the point of application.**
- 9) Applicant must generally **not be beyond the retirement age** at the point of first award.ⁱ
- 10) All research must be conducted in Singapore at a public research institute, hospital/centre or medical school.
- 11) Applicant should not have outstanding reports from NMRC grants and other national grants.
- 12) Applicant may only submit one application to the human capital/talent awards (i.e. STaR, CSA, HCSA, CIA and TA) for each round of grant call.
- 13) Applicant is only allowed up to 2 resubmissions following an unsuccessful first submission.

Notes:

- iv. *A*STAR CS scholar from the National Science Scholarship (NSS) (MBBS-PhD) or NSS (MD-PhD) schemes and fulfil the following may apply:*
 - a. *hold a primary appointment in a public health institution (PHI), Academic Medical Centre (AMC), or medical school; or*
 - b. *hold a primary appointment in A*STAR and a joint appointment in the PHI/AMC/medical school, and the grant application is supported by the PHI/AMC/medical school. The PHI/AMC/medical school is to consider if the applicant is able to demonstrate that he/she can act as a bridge between A*STAR and the healthcare system.*

The grant application must be submitted through the PHI/AMC/medical school as the host institution.
- v. *An applicant without regular-rank faculty/academic appointment pledged by the AMC/medical school can be considered, if the PHI demonstrates that there is existing framework and governance that allow sustained research career / opportunities available to the applicant, as well as the availability of a conducive and facilitation structure where high quality research can be undertaken.*

HPHSR Clinician Scientist Award (4)

Review Process

- **Two-stage** review process comprising an **international peer review stage** followed by a **collective review** by the local HCSA panel.
- Applicants may be invited for interview by the local HCSA panel.
- The review process will take about 6 months after the application closes.

Assessment Criteria

- Track Record of PI will be the highest priority
- Scientific excellence and potential to improved health outcomes and adoption into actual policy/practice
- Feasibility of study in local context
- Productivity
- Overall Impact in local context

Clinician Innovator Award (CIA)

Clinician Innovator Award (1)

Objective

- To provide salary & funding support for selected outstanding clinician innovators, to bring healthcare innovation ideas to the next level, and eventually, towards the commercialisation end-point.
- 2 categories of award:
 - Investigator level (INV)*
 - Senior Investigator level (SI)

**One renewal allowed, second renewal on a case-by-case basis*

Funding Quantum

- Up to 0.3 FTE salary support of actual research time, subject to NMRC annual salary cap
- Grant support of up to:
 - **S\$100k over 2 years** (INV category)
 - **S\$200k over 2 years** (SI category)
- 30% indirect costs

Grant Call Frequency

- Twice a year
- Opening dates: Typically in **May** and **November**

Clinician Innovator Award (2)

Eligibility Criteria

- 1) Applicants should hold a **clinical qualification (e.g. MBBS, MD, BDS or equivalent), with specialty training beyond medical or dental school** (including specialists, family physicians and public health practitioners).^{i,ii}
- 2) Applicants who are health science / healthcare professionals with non-medical degrees, such as nurses, pharmacists and other allied health professions listed on MOH's website* in clinical practice, possess PhD or equivalent qualifications are eligible to apply. Those without PhD or equivalent qualifications, but possess relevant research track record can be considered for award on case-by-case basis.
- 3) Applicants working in human clinical research, including epidemiologists and biostatisticians, and whose research is clinically relevant and has potential health impact, will be considered as exceptions on a case-by-case basis.ⁱⁱⁱ
- 4) All applicants must be doing research in clinical settings or doing research with clinical and healthcare applications/relevance.
- 5) Applicants with non-medical degrees conducting laboratory based research are not eligible.

Notes:

- i. *Recipients of NMRC Human Capital Awards (i.e., STaR, CSA, HCSA, CIA/CIDA) and Transition Award are exempted.*
- ii. *Clinicians with recognised specialty training are:*
 - a. *Clinicians who are accredited by the MOH Specialists Accreditation Board (SAB), Dental Specialists Accreditation Board (DSAB) and Family Physicians Accreditation Board (FPAB).*
 - b. *Clinicians who do not fulfil the above but are able to demonstrate completion of specialist training in countries which do not have specialist boards/colleges and are holding consultant positions as a specialist may be considered on a case-by-case basis.*
- iii. *Applicants who are submitting on an exception basis are to submit their CV (with track records including publication records and grants held as PIs/Co-PIs in the past 5 years) to the Secretariat to determine their eligibility prior to submitting a full proposal.*

Clinician Innovator Award (3)

Eligibility Criteria (con't)

- 6) Applicant must hold the following appointments:
 - a) A primary appointment in a local public hospital/public health institutions/national specialty centre/public university/Academic Medical Centre (AMC) and be salaried by the institution;^{iv} and
 - b) A regular-rank faculty/academic appointment in one of the AMCs or medical schools **within 3 months of award conveyance.**^v
- 7) Applicant must be a Singapore citizen or Permanent Resident **at the point of application.**
- 8) Applicant must generally **not be beyond the retirement age** at the point of first award.ⁱ
- 9) All research must be conducted in Singapore at a public research institute, hospital/centre or medical school.
- 10) Applicant should not have outstanding reports from NMRC grants and other national grants.
- 11) Applicant may only submit one application to the human capital/talent awards (i.e. STaR, CSA, HCSA, CIA and TA) for each round of grant call. Applicants are allowed to hold up to 0.3 FTE salary support under the Clinician Scientist / Clinician Investigator Salary Support Programme (CS/CISSP), if awarded the CIA.
- 12) Applicant is only allowed up to 2 resubmissions following an unsuccessful first submission.

Notes:

- iv. A*STAR CS scholar from the National Science Scholarship (NSS) (MBBS-PhD) or NSS (MD-PhD) schemes and fulfil the following may apply:
 - a. hold a primary appointment in a public health institution (PHI), Academic Medical Centre (AMC), or medical school; or
 - b. hold a primary appointment in A*STAR and a joint appointment in the PHI/AMC/medical school, and the grant application is supported by the PHI/AMC/medical school. The PHI/AMC/medical school is to consider if the applicant is able to demonstrate that he/she can act as a bridge between A*STAR and the healthcare system.

The grant application must be submitted through the PHI/AMC/medical school as the host institution.

- v. An applicant without regular-rank faculty/academic appointment pledged by the AMC/medical school can be considered, if the PHI demonstrates that there is existing framework and governance that allow sustained research career / opportunities available to the applicant, as well as the availability of a conducive and facilitation structure where high quality research can be undertaken.

Clinician Innovator Award (4)

Review Process

- **Two-stage** review process comprising an **expert review stage** followed by a **collective review** by the local CIA panel.
- Applicants may be invited for interview by the local CIA panel.
- The review process will take about 6 months after the application closes.

Assessment Criteria

- Track Record of PI will be the highest priority
- Demonstration of intellectual property position
- Viability of development and commercial plans
- Feasibility of study in local context
- Productivity
- Overall Impact in local context

Notes on CSA, HCSA and CIA

- Applicant may decide which programme is more suitable to apply for.
- The key difference between the programmes would be how the proposals are evaluated (i.e., expected outcomes). Proposal assessment will be in line with the criteria for the respective programmes.
- The review panel will comprise experts clearly informed of the assessment criteria of that programme.

For example, work that generates outcomes such as new clinical guidelines or spin offs may not be given as much weight under CSA compared to HCSA or CIA respectively.

Transition Award (TA)

Transition Award (1)

Objective

- To assist **budding, young clinician scientists** who have just returned from formal research training, to build up their capability in research
- Help the clinicians to transit to a stable independent research position or other independent research funding.
- Expected to “differentiate” into one of the three CS tracks of TCR, HPHSR or health technology.

Funding Quantum

Funding quantum is awarded over 4 years comprising:

- 0.5 FTE to 0.7 FTE salary support of actual research time, subject to NMRC annual salary cap
- Grant support of up to **S\$300k**
- 30% indirect costs

Grant Call Frequency

- Twice a year
- Opening dates: Typically in **May** and **November**

Transition Award (2)

Eligibility Criteria

- 1) Applicants should hold a **clinical qualification (e.g. MBBS, MD, BDS or equivalent), with specialty training beyond medical or dental school** (including specialists, family physicians and public health practitioners).ⁱ
- 2) Applicants must have received **in-depth scientific training** through a PhD programme, Masters programme, or at least 2 years post-doctoral intensive research experience, in relevant local or overseas universities, research institutes, centres etc.
- 3) Applicants who are health science / healthcare professionals with non-medical degrees, such as nurses, pharmacists and other allied health professions listed on MOH's website* in clinical practice, possess PhD or equivalent qualifications are eligible to apply. Those without PhD or equivalent qualifications, but possess relevant research track record can be considered for award on case-by-case basis.
- 4) Applicants working in human clinical research, including epidemiologists and biostatisticians, and whose research is clinically relevant and has potential health impact, will be considered as exceptions on a case-by-case basis.ⁱⁱ
- 5) All applicants must be doing research in clinical settings or doing research with clinical and healthcare applications/relevance.
- 6) Applicants with non-medical degrees conducting laboratory based research are not eligible.

Notes:

- i. Clinicians with recognised specialty training are:
 - a. Clinicians who are accredited by the MOH Specialists Accreditation Board (SAB), Dental Specialists Accreditation Board (DSAB) and Family Physicians Accreditation Board (FPAB).
 - b. Clinicians who do not fulfil the above but are able to demonstrate completion of specialist training in countries which do not have specialist boards/colleges and are holding consultant positions as a specialist may be considered on a case-by-case basis.
- ii. Applicants who are submitting on an exception basis are to submit their CV (with track records including publication records and grants held as PIs/Co-PIs in the past 5 years) to the Secretariat to determine their eligibility prior to submitting a full proposal.

* <https://www.moh.gov.sg/hpp/allied-health-professionals/career-practices/CareerNPracticesDetails/allied-health-professions>

Transition Award (3)

Eligibility Criteria (Con't)

- 7) Applicants should **not have been an independent PI** on national/international research grants. Recipients of institutional grants or NIG grants are eligible to apply. Applicants who have previously held one national grant (e.g. EDG or IRG), can apply on exceptions basis with justifications.ⁱⁱ
- 8) For clinicians (with MBBS/MD/BDS), the number of years after **exiting from specialist training should not exceed 8 years**. For non-medically trained healthcare professionals and applicants applying on exception basis, the number of years post PhD (or post basic degrees for those without PhD) should not exceed **8 years**.
- 9) Applicant must hold a primary appointment in a local public hospital/public health institutions/national specialty centre/public university/Academic Medical Centre and be salaried by the institution.ⁱⁱⁱ
- 10) Applicant must be a Singapore citizen or Permanent Resident **at the point of application**.
- 11) All research must be conducted in Singapore at a public research institute, hospital/centre or medical school.
- 12) Applicant should not have outstanding reports from NMRC grants and other national grants.
- 13) Applicant may only submit one application to the human capital/talent awards (i.e. STaR, CSA, HCSA, CIA and TA) for each round of grant call.
- 14) Applicant is only allowed up to 2 resubmissions following an unsuccessful first submission.

Notes:

- iii. A*STAR CS scholar from the National Science Scholarship (NSS) (MBBS-PhD) or NSS (MD-PhD) schemes and fulfil the following may apply:
 - a. hold a primary appointment in a public health institution (PHI), Academic Medical Centre (AMC), or medical school; or
 - b. hold a primary appointment in A*STAR and a joint appointment in the PHI/AMC/medical school, and the grant application is supported by the PHI/AMC/medical school.
The PHI/AMC/medical school is to consider if the applicant is able to demonstrate that he/she can act as a bridge between A*STAR and the healthcare system.
The application must be submitted through the PHI/AMC/medical school as the host institution.

Transition Award (4)

Review Process

- Introduction of rebuttal stage.
- Evaluation by the Transition Award Review Panel.
- Applicants may be invited for interview by the review panel.
- The review process will take about 6 months after the application closes.

Assessment Criteria

- Track record and suitability of the applicant to be an independent investigator/CS will be of highest priority
- Quality of proposed research
- Feasibility of study in local context
- Productivity
- Overall Impact in local context
- Mentorship training plan, suitability and track record of mentor

NMRC Research Training Fellowship (RTF)

NMRC Research Training Fellowship (1)

Objective

- Awarded to outstanding and talented clinicians and health science / healthcare professionals for research training to have qualifications and skills to become Clinician Scientists.

Funding Quantum

Funding quantum of up to \$500K is awarded over 2-3 years (extendable to 4 years for PhD degree) comprising:

- Salary support
- Tuition Fees
- Conference support
- Maintenance allowance and others (e.g. return air travel, health insurance)*

** For overseas training, to be accordance to the institution's guidelines*

Clinicians pursuing overseas full-time PhD training may request for up to S\$800k.

Grant Call Frequency

- Twice a year
- Opening dates: Typically in **May** and **November**

NMRC Research Training Fellowship (2)

Eligibility Criteria

- 1) Applicants must be **medical doctors/dental surgeons** (i.e., with MBBS/MD/BDS degree) who are registered with the Singapore Medical Council/Dental Board. Residents or AST/BST trainees who wish to pursue research training in the midst of their clinical training will be required to submit additional documents. Medical/House officers are not eligible to apply.
- 2) **Health science / healthcare professionals** with non-medical degrees, such as nurses, pharmacists and other allied health professions listed on MOH's website* and possess PhD or equivalent degrees are eligible to apply. Those without PhD or equivalent degrees may apply for training leading a formal postgraduate degree.
- 3) Applicant must be a Singapore citizen or Permanent Resident **at the point of application**.
- 4) Applicant must hold a primary appointment in a local public hospital/public health institutions/national specialty centre/public university/Academic Medical Centre (AMC) and be salaried by the institution.ⁱ

Notes:

- i. *A*STAR CS scholar from the National Science Scholarship (NSS) (MBBS-PhD) or NSS (MD-PhD) schemes and fulfil the following may apply:*
 - a. *hold a primary appointment in a public health institution (PHI), Academic Medical Centre (AMC), or medical school; or*
 - b. *hold a primary appointment in A*STAR and a joint appointment in the PHI/AMC/medical school, and the grant application is supported by the PHI/AMC/medical school. The PHI/AMC/medical school is to consider if the applicant is able to demonstrate that he/she can act as a bridge between A*STAR and the healthcare system.*

The application must be submitted through the PHI/AMC/medical school as the host institution.

NMRC Research Training Fellowship (3)

Eligibility Criteria (con't)

- 5) Applicant must remain employed in a public institution in Singapore during and throughout duration of the award. Applicant will also be required to serve a bond with the Government of Singapore upon the completion of training.ⁱⁱ
- 6) Applicant is encouraged to apply for local training if expertise is available locally so that knowledge acquired is applicable in the local context.
- 7) The curriculum of the formal degree can be research-based [or course-based](#). Applicant is advised to apply to the university of interest and liaise the necessary arrangements for the research training or degree programme concurrently with this fellowship application to avoid delay in the submission of the application and commencement of training.
- 8) Applicant should not have outstanding reports from NMRC grants and other national grants.
- 9) [Applicant is only allowed up to 2 resubmissions following an unsuccessful first submission.](#)

Notes:

- ii. *Please refer to the NMRC website for details on the types of awards and corresponding bond periods.*
- iii. *Applicants may be invited for interview by the panel.*

NMRC Research Training Fellowship (4)

Other Requirements

- All applicants must provide a write-up on their research area/focus, to justify how the curriculum/training will enable them to pursue a career as a CS and to include a 5-year career plan post-training.
- For formal course-based training which does not require a research project, applicants need not submit a research proposal.
- All applicants are required to nominate a research supervisor/mentor to provide guidance during and after training.

Submission Mode and Deadline

June 2021 Grant Call

Submission Mode and Deadline

- Grant Call will be open on **14 June 2021**.
- Grant Call Closing Deadlines:

| Grant Programme | Deadline |
|-------------------|-------------------------------|
| OF-LCG | 26 July 2021 (Mon), 5pm |
| CS-IRG/CS-IRG-NIG | 12 July 2021 (Mon), 5pm |
| OF-IRG/OF-YIRG | 12 July 2021 (Mon), 5pm |
| CTG-ICT | NA – Open throughout the year |
| CTG-IIT | 12 July 2021 (Mon), 5pm |
| STaR | 12 July 2021 (Mon), 5pm |
| CSA/HCSA/CIA | 12 July 2021 (Mon), 5pm |
| TA | 12 July 2021 (Mon), 5pm |
| NMRC RTF | 12 July 2021 (Mon), 5pm |

Submission Mode and Deadline

- It is mandatory for all applications to be submitted online via IGMS.
- Please ensure that all submissions are endorsed by the corresponding Research Director (for Host Institution) and Dean (for Academic Institution)* or equivalent , by the deadline.
- The Host institution to submit a summary of the applications to NMRC.
- We will not entertain any late/hardcopy submissions or submissions from individual applicants without endorsement from the Host Institution and Academic Institution* .
- Application forms, guidelines and grant call information will be available on the NMRC website by 14 June 2021.

** For applicable STaR, CSA, HCSA and CIA applicants with regular rank faculty / academic appointments. AI's endorsement will now be required under "Other Attachment" template (i.e., no longer be required in the IGMS).*

Changes to Application Templates

For Information

1) Proposal Template

Submission Type and Requirements

New submission:

- A checkbox for PIs to declare that they have not submitted any similar proposals to NMRC before.
- Proposal has to be more than 50% different in content (and with substantially different Specific Aims) from past submission in order for it to be considered as a new submission.*

Resubmission:

- First page of proposal: 2-page summary of how the revised proposal has addressed past reviewers'/panel's comments and new features/merits, to help set the context of the resubmission for reviewers.
- Resubmission Annex: To set a 3-page limit for the response to reviewers/panel so as to encourage PI to respond succinctly. The 3-page limit will exclude the original past review reports.

Renewal:

- Renewal Annex: 2-page document (5-page for OF-LCG) to indicate the progress and outputs of previous project. (Past final/progress report of previous project is no longer required)

Note – Provision of any supplemental information/data to the proposal, other than the NMRC-specified Annexes, is prohibited.

2) CV Template

- Increase of page limit to 3
- Changes in format and required fields

Please be reminded that NMRC will reject application upon submission if:

- Any of the required documents was not submitted
- Wrong template (e.g., outdated, different programme's) was used for any of the required documents (Please use latest templates as available in IGMS)
- Any of the Proposal or CV documents exceeds page limits

Thank you.