NHG Health Centre for MedTech & Innovations (CMTi)
Clinician Innovator Career Scheme (CICS)
INFORMATION SHEET

1. INTRODUCTION

The **NHG Health CMTi Clinician Innovator Career Scheme (CICS)** is an innovation talent development programme that aims to strengthen a clinician's innovation capabilities to improve patient care and human health through translational innovation. This seeks to support applicants in competing successfully for the National Medical Research Council (NMRC) Clinician Innovator Award (CIA) or equivalent within the next 2-3 years while further building their innovation careers.

Awardees will be offered access to LKCMedicine's library resources during the term of the award.

Components of the Scheme

1.1. **Funding Support**

- Project funding quantum up to S$50,000, for up to 2 years; and
- Salary support of up to 0.2 FTE for up to 2 years, with an applicable annual salary cap by the applicant's clinical designation (Table 1).
  - NHG Health Host Institution will need to top up the difference if the awardee's salary exceeds the applicable annual salary cap.
  - Salary support will cover the total annual compensation, inclusive of salaries, CPF, fringe benefits, as well as bonus/incentive payments.

Table 1: Annual Salary Cap by Clinical Designation

Clinical Designation	Annual Salary Cap
Consultant	S$250,000
Associate Consultant	S$200,000
Health Science/Healthcare Professional	S$150,000

1.2. **Mentorship**

Each applicant is required to nominate a mentor from NHG Health, for mentorship in the following areas:

a) Guidance in their clinician innovator career development
b) Advice on their innovation project
c) Navigation to appropriate innovation resources
d) Engagement in institution or NHG Health cluster level innovation activities and initiatives

The mentor should be an established clinician innovator who:

a) Is involved in innovation with significant impact on clinical care;
b) Has had experience in the proposed or relevant area of innovation;
c) Has strong foundation and knowledge in HealthTech Innovation;
d) Has had experience in supervising or providing innovation mentorship

Applicants may also nominate additional mentor(s) including subject matter experts from industry where relevant.

During the award, awardees will be granted access to the subject matter experts on an adhoc basis in area(s) of their own interest. Proposed topic areas may include venture building, medical technology development cycle, medical device regulatory affairs, intellectual property, etc. This will be subsequently facilitated by NHG Health Centre for MedTech and Innovations (CMTi).

Applicants may contact the CICS Secretariat to help facilitate matching of appropriate mentor if required or refer to the Academy of Clinician Scientists and Innovators (ACSI) mentors' directory and CMTi Committee Members' listing (Annex A). Applicants are encouraged to refer to Annex B on some guidance on how to engage with mentors effectively.

2. ELIGIBILITY

2.1. Applicants should be:

a) **Medical doctors** (i.e. clinically qualified with MBBS/MD/BDS) with primary appointments of Associate Consultant / Consultant at NHG Health institutions. Those without specialty training may apply if they are in clinical practice, excluding House Officers, Medical Officers, and Residents. They should have either completed the Singapore Biodesign (SB) Innovation Fellowship or Faculty Fellowship or be able to demonstrate equivalent level of expertise in HealthTech innovation through project and grant experience as follows:

   a) Has completed at least one innovation project as lead Principal investigator (PI) supported by an intramural or extramural grant of at least S$50,000; or
   b) Has completed an innovation project as lead PI that has achieved implementation and/or commercial outcomes.

   or

- **Health science / healthcare professionals** with non-medical degrees, such as nurses, pharmacists, optometrists, and other allied health professions listed on this website in **clinical practice**, with primary appointments at NHG Health institutions and **hold a PhD or a postgraduate qualification recognised for NMRC CIA**.

2.2. Applicants who are non-clinically qualified or non-practising healthcare professionals may be considered on a **case-by-case basis**, if the proposed work is in **human clinical research** (i.e., research involving direct interaction with human subjects, excluding laboratory-only studies without clinical application), and they **hold a PhD**.

2.3. As awardees are expected to apply to NMRC CIA or equivalent by the end of their CICS award period, applicants should take note of the latest eligibility criteria of the national talent development programme and ensure that he/she is able to meet them.

2.4. Past NMRC CIA applicants who were unsuccessful may apply to the CICS on an exception basis.

2.5. The proposed CICS project should be a HealthTech product innovation project that aims to potentially address unmet clinical needs relevant to a medical condition/ disease in healthcare. Applicants should demonstrate the proposal's healthcare impact and translation through potential commercialisation and/or implementation and adoption. Projects focusing on process optimisation or administrative improvements would fall outside the scope of CICS.

2.6. Applicants are to ensure that the appropriate collaborator(s) essential to technology development for their proposed project, are secured where required, before applying. Applicants may reach out to CMTi for assistance in matching of collaborator(s).

2.7. Any intellectual property (IP) developed in relation to the project would be managed in accordance with the prevailing NHG Health IP Policy.

2.8. Interested clinicians are strongly encouraged to contact the CICS Secretariat for discussion on suitability of the programme prior to applying, and to engage with CMTi for support in project scoping.

2.9. Applicants are required to seek endorsements for their applications from their Reporting Officer (RO), Head of Department (HOD), Director/Chief/Head of Family Group (applicable health science / healthcare professionals only) and Director of Research (DOR).

2.10. The applicant's Department should be able to make provisions for the applicant's innovation commitments during the CICS award period (if awarded) and continue to facilitate his/her career pathway as a clinician innovator beyond the CICS award.

3. REQUIREMENTS OF THE SCHEME

3.1. Key Performance Indicators (KPIs)

KPI	Details
Application to Extramural Awards	NMRC CIA or equivalent[1]
Attainment of Grant Monies	Intramural/Extramural
Implementation of Innovation or Proposed Solution into Clinical Practice, Health and Economic Outcomes	To be demonstrated through Interim/Final Reports

3.2. Assessment

Awardees are required to submit an Interim Progress Report and a Final Report within 1 month after the mid-point of award and 3 months from the end of funding period respectively.

Those with outstanding report(s) for grants/programmes administered or managed by NHG Health Group Research and Innovation (GRI) that is/are not submitted by the stipulated timeline, will not be eligible to submit new applications[2] as Principal Investigator (PI) until such report(s) is/are submitted. This will exclude report(s) with extended submission timeline as acknowledged or accepted by the grant/programme Secretariat due to a valid consideration.

[1] The CICS award will be subject to revisions upon successful award of the NMRC CIA or equivalent, if any, within the award period. The CICS requirement to present to the CMTi Committee at the interim and completion of award could also be waived.

[2] This refers to any new application for grant/programme administered or managed by NHG Health Group Research and Innovation (GRI), including the NHG Health Centre for MedTech and Innovations (CMTi) HealthTech Grant, CMTi-National Health Innovation Centre (NHIC) Joint HealthTech Grant, NHG Health-LKCMedicine Clinician Scientist Preparatory Programme (CSPP), NHG Health-LKCMedicine Clinician Scientist Preparatory Programme Plus (CSPP+), NHG Health Clinician Scientist Fellowship (CSF), NHG Health-LKCMedicine Clinician Scientist Career Scheme (CSCS), NHG Health CMTi Clinician Innovator Preparatory Programme (CIPP), NHG Health CMTi Clinician Innovator Preparatory Programme Plus (CIPP+), and NHG Health CMTi Clinician Innovator Career Scheme (CICS).

Awardees are required to present to the CMTi Committee at the mid-point and at the end of the CICS award period. Continuation of funding is dependent on the review of the progress based on presentations by the awardees. The CICS Secretariat will coordinate with the awardees on these matters.

4. APPLICATION PROCESS

4.1. Applicants must comply with the requirements of NHG Health Domain Specific Review Board (DSRB) to be the PI of the proposed project and ensure that they have met the minimum training requirements of NHG Health DSRB and/or other regulatory body (e.g., Health Sciences Authority (HSA) where applicable.

4.2. Applicants are required to submit all application documents **in softcopy** to the CICS Secretariat at NHG Health GRI through their Institution's Clinical Research Unit (CRU)/Clinical Research and Innovation Office (CRIO):

a) **Application Form**;
b) **Applicant's Curriculum Vitae (CV)**;
c) **Mentor(s)' CV**
d) **Budget Breakdown Form**;
e) **Written proof of intent to collaborate from Collaborator(s)** (i.e., email or letter of intent) – applicable only if project requires collaborator(s) for technology development; and
f) **Other Supporting Documents** (e.g. SB Innovation Fellowship or SB Faculty Fellowship Certificate of Completion, etc.)

4.3. The Institution's CRU/CRIO will set an **internal deadline** for the above submission and ensure that the documents reach the CICS Secretariat by the stipulated deadline. Please check with your institutions for the deadline. Applications submitted after the call closing date and time will not be considered.

4.4. Templates for the application documents can be downloaded from https://talentdev.gri.nhg.com.sg/ from the opening date of the Call for Applications.

4.5. Shortlisted applicants may be required to conduct a presentation of his/her proposal to the Review Panel after submission.

4.6. Ethics applications are to be submitted to NHG Health DSRB, relevant IRBs or other regulatory bodies for review after recommendation by the Review Panel, if applicable and if not already done so. The CICS Secretariat will coordinate with shortlisted applicants on these matters.

4.7. Please allow 6-8 months from the Call closing date for processing and review of applications.

5. APPLICATION EVALUATION CRITERIA

5.1. The applications will be evaluated based on:
a) Proposed project's aims, methodologies, budget, measurable outcomes and significance of potential healthcare impact (40%);
b) Applicant's level of interest and commitment towards innovation (e.g., ongoing projects, grant applications, etc.) (30%); and
c) Applicant's potential for growth as a clinician innovator, including how innovation fits into their future career plans (30%)

6. CONTACT INFORMATION

For more information, please refer to https://talentdev.gri.nhg.com.sg/ and/or contact the CICS Secretariat:

Ms Adeline Chan
Clinician Scientist Development Office
Group Research and Innovation, NHG Health
Email: adeline.mx.chan@nhghealth.com.sg

Ms Valerie Yeo
Clinician Scientist Development Office
Group Research and Innovation, NHG Health
Email: valerie.mh.yeo@nhghealth.com.sg

Annex A

NHG Health CMTi Committee Members

Institution	Name	Position(s)
NHG Health Group Office	A/Prof Tey Hong Liang	Clinical Director, CMTi Senior Consultant, National Skin Centre
	Adj A/Prof Eric Wong	Group Chief Digital Health Officer
	Ms Shirley Heng	Group Chief Nurse
	Mr Wilfred Soon	Group Chief Information Officer
	A/Prof Jimmy Lee	Group Chief Research and Innovation Officer
Institute of Mental Health	A/Prof Christopher Cheok	Senior Consultant, Forensic Psychiatry
Khoo Teck Puat Hospital	Adj Asst Prof Bin Wern Hsien	Senior Consultant, Anaesthesia Assistant Chairman, Medical Board (Medical Manpower, Clinical Policies and Standards)
	Adj Asst Prof Clement Chia	Senior Consultant, General Surgery & Head of Breast Surgery Service
Tan Tock Seng Hospital	Adj A/Prof Loh Yong Joo	Head and Senior Consultant, Rehabilitation Medicine Director (Clinical Innovations), Clinical Research and Innovation Office (CRIO)
	Mr Khalid Anuar	Director, Allied Health
	Dr Ng Tat Ming	Principal Pharmacist (Specialist) Research and Innovation Lead, Division of Pharmacy
National Centre of Infectious Diseases	Adj A/Prof Shawn Vasoo	Executive Director & Senior Consultant
Woodlands Hospital	Adj Asst. Prof Shum Cheuk Fan	Senior Consultant, Surgery (Urology Service)
NHG Polyclinics	Adj Asst Prof Valerie Teo	Family Physician-Senior Consultant Deputy Director, Clinical Services

Annex B

GUIDELINES FOR
Healthy Mentor-Mentee Relationship



Active engagement

- **Proactive**: Takes initiative in scheduling meet-ups, proposing agendas, updating on progress, follow-up on action plans
- **Seek feedback**: Regularly asks for feedback and identify areas of improvements
- **Engage**: Contributes to discussions, share your thoughts and ideas and update your mentor about the progress of your work and challenges you encounter

Commitment to learning, personal and professional development

- **Stay informed:** Keep up-to-date about current research and innovation trends in your field and to engage meaningfully in discussions with your mentor.
- **Develop skills:** Develop relevant skills, including research techniques and data analysis, to make the most of your mentor's guidance.
- **Set goals:** Collaborate with your mentor to set clear, realistic goals for your projects and career path.
- **Seek opportunities:** Seek out leaning and networking opportunities and share your experiences with your mentor for feedback.
- **Develop independence:** Show initiative in developing independence as a researcher or innovator, demonstrating your commitment to growth.

