An RIE2030 Human Health & Potential Funding Initiative

HHP MISSION

HHP MISSION

A Mission-Oriented Approach to BioMedTech

HHP MISSION is a national funding initiative under Singapore's Human Health & Potential (HHP) domain that will replace HHP IAF-PP in RIE2030.

It focuses on **clearly defined, real-world challenges focused on Biotech & MedTech,** inspired by models of active project management, such as ARPA-H and Wellcome Leap.

Projects bridge research discoveries to real-world impact and are designed to deliver commercial outcomes with a **5-10 year horizon to impact.**

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Bridging the Gap

From upstream academic research to downstream translational receptacles

Basic Academic Research

MISSION: Problem-driven, outcome-focused research

Industry or Downstream translational receptacles
e.g., EDDC, NATi, DxD Hub

Traditional funding:
- Curiosity driven
- PI-led
- Publication focused

MISSION funding:
- Impact driven
- Actively managed
- Translational outputs

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A different way to fund innovation

Key strategic shifts through MISSION

Innovative Funding Approach

- Focuses on strategically identified areas of unmet need
- Targets critical scientific and technical gaps that constrain transformative advances
- Directs resources towards overcoming barriers whose resolution can unlock significant opportunities for downstream development and commercialisation

Thematic Focus Areas

- Concentrates investments in selected thematic areas
- Builds a focused and strategic portfolio to maximise commercial impact
- Creates complementary outputs and strengthens capabilities in areas where Singapore possesses differentiated strengths and can develop a competitive edge

Active Programme Management

- Identifies challenges early, adapts strategies quickly and keeps projects aligned with intended outcomes
- Applies a milestone-driven approach with clear portfolio level oversight
- Allocates resources dynamically towards the most promising opportunities

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MISSION Programme Structure

2 Complementary Funding Streams

Portfolio Director

Strategic oversight and active management of full MISSION portfolio

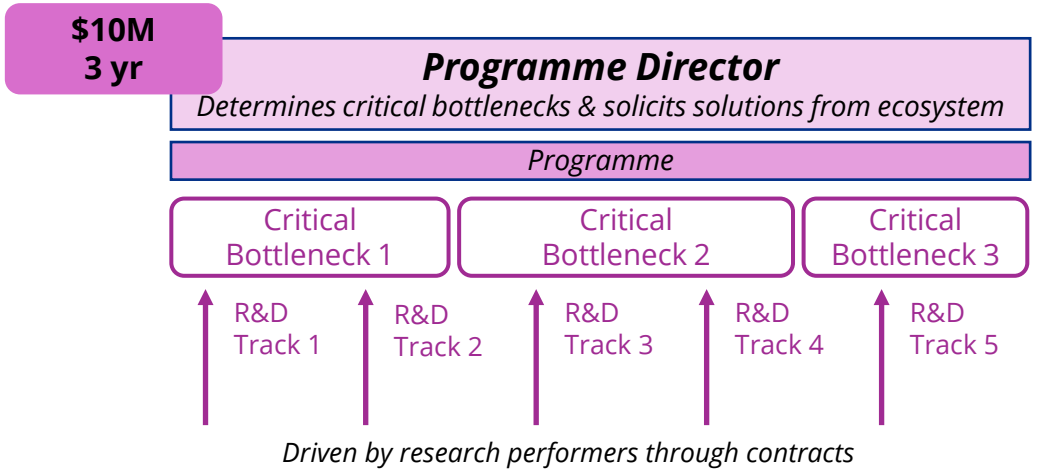
Stream 1 (30%)

- *Discrete projects to unlock technical/ biological gaps*
- *PI-led, grant mechanism*
- *Up to $5M over 3 years*

Project 1 – *Critical Bottleneck*	**$5M 2 yr**
Project 2 – *Critical Bottleneck*	**$5M 3 yr**

Stream 2 (70%)

- *Larger scale complex programmes with multiple R&D tracks*
- *Programme Director-led, contract mechanism*
- *Up to $15M over 5 years*



Stream 1 de-risks and validates emerging ideas through discrete projects, while Stream 2 supports integrated, larger scale programmes.

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MISSION Outcomes

Designed with the end in mind

Near-Term

A key project-level success indicator is the delivery of **tangible translational outputs and IP** that merit downstream development, with national translational platforms as potential receptacles

Potential downstream development partners

dxdhub DIAGNOSTICS DEVELOPMENT HUB
MEDTECH CATAPULT
NATi
STDR Singapore Therapeutics Development Review
EDDC Experimental Drug Developm Centre

Or direct uptake by industry

Long-Term

Spin-offs

Out-licensing

Industry adoption

Strengthening Singapore's biomedical innovation ecosystem

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Institutional Quota & Eligibility for Stream 1

To support a focused and competitive evaluation process, a quota system will apply

Institution	Maximum No. of Applications
National University of Singapore (NUS)	5
Nanyang Technological University (NTU)	5
A*STAR	5
All other public research institutes in Singapore	2

- Institutions are encouraged to **align their internal review and selection processes to support institutional prioritizing** to adhere to the quota prior to submission.

- **Eligibility Criteria –** Lead Investigator (Lead-I) should:
  - Hold at least 0.7 FTE primary appointment in a Singapore publicly funded research organisation or institute of higher learning;
  - Run a laboratory or research programme that carries out research in Singapore; and
  - Have a track record of leadership ability in coordinating research programmes and providing mentorship to research teams, as well as have productive research outcomes.

*Note: Quota applies only to submissions as Host Institution. E.g., If an A*STAR co-PI participates in an NUS-led application, that counts only towards the NUS quota.*

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Timeline for Stream 1

Illustrative example of grant call process*

31 Aug 2026

Open Call for Stream 1 Projects
Written proposal submission
(Call open for ~8 weeks)

26 Oct 2026, 12pm (SGT)

Stream 1 Call Closes
Written submissions due

Oct – Dec 2026

Technical Review
Evaluation of written proposals

Jan – Mar 2027

Pitching of Project to Steering Committee
Shortlisted applicants to prepare pitch deck

End-Mar 2027

Award of Stream 1 Projects

Apr 2027 onwards

Start of Stream 1 Projects

**Please note that as HHP MISSION is a new funding initiative in RIE2030, there may be shifts to the timeline as illustrated above.*

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HHP MISSION FOCUS AREA

Scope of HHP MISSION Stream 1 Funding

- HHP MISSION Stream 1 supports focused, translationally anchored projects that advance sufficiently novel and differentiated approaches to improve upon the current standard of care in a specific biological or disease context, with the aim of generating tangible translational outputs, commercialisable IP and decision-enabling evidence within 2.5 to 3 years, and an indicative funding envelope of up to S$5M (including 30% indirect costs).

- Each call will be structured around thematic focus areas aligned with HHP MISSION priorities. Proposals that fall outside these focus areas may also be considered, subject to a strong justification of their alignment with MISSION's objectives.

- **Successful proposals are expected to:**
  - *Address the thematic focus area identified by MISSION*
  - *Propose a novel and differentiated scientific or technical approach that meaningfully improves upon the current standard of care with clear translational relevance*
  - *Demonstrate a clear line-of-sight to downstream development opportunities and potential commercial impact, informed by the existing and emerging treatment landscape.*

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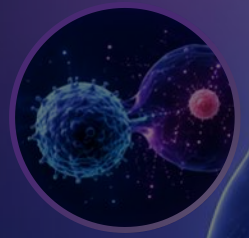
Immune homeostasis, immune dysregulation & inflammation as drivers of disease

Challenge 1:
Uncover disease-driving pathways and cell states

What if we could identify the dysregulated pathways and cell states that drive disease – and reveal precise opportunities to restore immune homeostasis?

Challenge 2:
Reset immunity without broadly suppressing it

What if we could selectively reprogramme dysregulated immunity to deliver deeper and more durable responses while preserving protective immune function?



Challenge 3:
Make immune dysfunction clinically actionable

What if clinicians could identify and track immune dysregulation early enough to change treatment decisions and prevent irreversible damage?

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Guidance for Applicants: Illustrative Scope and Expectations

Focus area: Immune homeostasis, immune dysregulation and inflammation as drivers of disease

Example #1:
Using human cell/tissue-derived systems that capture complex, integrated disease states, apply cutting-edge technologies, including artificial intelligence, to uncover and validate dysregulated pathways or cell states that drive disease persistence, relapse, progression or tissue injury.

Example #2:
Establish proof-of-concept for a targeted approach to modulate a defined pathway or cell state in a specific tissue context, with the potential to modulate/reset dysregulated immune responses or restore tissue homeostasis while reducing reliance on broad systemic immunosuppression.

- *Proposals should improve upon current standard of care, e.g. enhancing efficacy, addressing inadequate depth or durability of response, or widening the therapeutic index. This could include targeting pathogenic cell states, resetting dysregulated biological responses, restoring tissue homeostasis or achieving tissue-specific modulation.*
- *Proposals should be grounded in human data or biologically relevant human systems, rather than relying primarily on conventional animal models or studies of isolated cell populations. They should generate convincing evidence that the proposed intervention can modulate the identified pathway or cell state and produce a meaningful disease-modifying impact differentiated from current treatment approaches, coupled with a tractable path towards therapeutic development.*

Example #3:
Develop medical devices or clinically actionable tests (e.g. immunodiagnostic, molecular-diagnostics, imaging or AI-driven diagnostics) that improve the diagnosis or management of immune dysregulation in a defined high-value disease context.

- *Proposals should focus on a specific decision point where current clinical classification/ diagnosis is inadequate, such as identifying high-risk patients, distinguishing active inflammatory disease from irreversible tissue damage, predicting relapse or progression, or selecting patients for targeted immune-modulating therapies.*
- *Proposals should generate early evidence linking the proposed technology to a clinically meaningful decision point or outcome, and a feasible diagnostic, companion diagnostic or medical device product path.*

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FAQs

FAQ (1/6): Programme Overview

Q: Who is the Implementing Agency for HHP MISSION and how will HHP MISSION be hosted?
A: A*STAR is the Implementing Agency (IA) for HHP MISSION. HHP MISSION operates as a National Platform hosted by A*STAR.

Q: How does HHP MISSION Stream 1 differ from HHP IAF-PP?
A: HHP MISSION has a thematically defined, actively managed and problem-driven approach that places greater emphasis on generating outcomes such as commercialisable IP that merit downstream development. MISSION shifts away from traditional grant KPIs such as publications and Industry R&D Spending (IRS).

Q: What should applicants expect under HHP MISSION's active programme management approach? Do I need to meet my project milestones?
A: HHP MISSION adopts an active programme management model inspired by ARPA-H and Wellcome Leap. Rather than operating as a traditional grant, projects will be actively supported through regular milestone reviews, strategic engagement with the Portfolio Director, and portfolio-level coordination to accelerate translation.

Projects are expected to meet their milestones; where challenges arise, teams should flag them early so that corrective actions, milestone revisions or portfolio decisions can be considered.

Q: What is the difference between MISSION Stream 1 and 2 and is MISSION Stream 2 a continuation of Stream 1?
A: Stream 2 is not intended to serve as a continuation or extension of Stream 1 projects. The two streams are designed to address different types of gaps. Stream 1 supports the de-risking and validation of emerging ideas through discrete projects, while Stream 2 supports integrated, larger scale programmes. Further details on Stream 2 will be shared in due course.

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FAQ (2/6): Scope of Funding

Q: What types of projects are within the scope of HHP MISSION Stream 1?
A: Stream 1 supports focused, translationally anchored projects that advance sufficiently novel and differentiated approaches to improve upon the current standard of care in a specific biological or disease context, with the aim of generating tangible translational outputs, commercialisable IP and decision-enabling evidence within 2.5 to 3 years. Each call will be structured around thematic focus areas aligned with HHP MISSION priorities. Proposals that fall outside these focus areas may also be considered, subject to a strong justification of their alignment with MISSION's overall objectives.

Q: What types of collaborations are supported under HHP MISSION Stream 1 funding?
A: HHP MISSION encourages new multidisciplinary and cross-institutional collaborations that bring together complementary expertise and capabilities to address the first-wave thematic focus areas and associated illustrative Stream 1 challenge statements. Proposed collaborations should be formed around the translational challenge being addressed, with all participating investigators and institutions meeting the relevant eligibility criteria and application requirements for the Stream 1 funding call. As HHP MISSION funding is intended to support public-sector research conducted in Singapore, grant funding cannot be provided to overseas collaborators or used to support R&D activities conducted outside Singapore.

Q: Is Research Scholarship (RS) fundable under HHP MISSION?
A: Research Scholarship (RS) may be funded by exception under Stream 1. Given the nature of the HHP MISSION funding Initiative, the proposed budget will be reviewed in detail during the budget scrubbing process to assess its relevance and reasonableness, and to determine whether the requested support is appropriate.

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FAQ (3/6): Application Process and Eligibility Criteria

Q: What is the format for Stream 1 application?
A: Stream 1 will involve a single-stage written application submission. Shortlisted applicants will subsequently be invited to prepare a pitch deck and present their proposal to the Steering Committee as part of the evaluation process.

Q: Who is eligible to lead a HHP MISSION Stream 1 project? Does MISSION Stream 1 need a Programme Director?
A: Lead-Is must meet the stated eligibility criteria for the Stream 1 funding call. The Programme Director (PD) role is specific to HHP MISSION Stream 2 and does not apply to Stream 1.

- ***Eligibility Criteria –*** *Lead Investigator (Lead-I) should:*
  - *Hold at least 0.7 FTE primary appointment in a Singapore publicly funded research organisation or institute of higher learning;*
  - *Run a laboratory or research programme that carries out research in Singapore; and*
  - *Have a track record of leadership ability in coordinating research programmes and providing mentorship to research teams, as well as have productive research outcomes.*

Q: Are non-faculty staff eligible to serve as Lead Investigators (Lead-Is)?
A: In general, non-faculty staff, such as postdoctoral researchers, senior research scientists or research fellows, may be considered for the Lead-I role if they meet all eligibility criteria. The institution must confirm that they will remain employed and fulfil the required FTE commitment throughout the grant period and should ensure that separate salary support is in place, as Lead-I salaries are non-fundable under the grant. The institution should also ensure that the staff member is suitably qualified to lead and deliver the project, with the necessary institutional support.

Q: Can exceptions be granted for applicants who do not meet the stated eligibility criteria (e.g., overseas faculty members)?
A: Requests for waiver of eligibility may be considered on a case-by-case basis, subject to the alignment with the objectives and requirements of HHP MISSION. Institutions seeking waiver for the stated eligibility criteria are encouraged to share the relevant details with the HHP MISSION Programme Office for consideration in a timely manner.

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FAQ (4/6): Institutional Quota

Q: Which institutions fall under the "All other public research institutes in Singapore" category, and what is the institutional quota for this category?
A: All applications from institutions such as Duke-NUS Medical School, NUH, SGH, NCCS, NHCS, SIT, CREATE and other eligible public research institutes will fall under the category “All other public research institutes in Singapore” and will therefore be each subject to the institutional quota of up to 2 applications per institution.

Q: How are HHP MISSION Stream 1 proposals selected by institutions, and how should applications be submitted?
A: As institutional selection is managed by respective institutions, applicants are encouraged to engage their respective offices of research early regarding the institutional review process and associated timelines. All Stream 1 applications should be submitted through the HHP MISSION Mailbox connect@hhp-mission.sg via the respective offices of research.

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FAQ (5/6): Evaluation Criteria

Q: How will Stream 1 proposals be evaluated, and what are the assessment criteria?
A: Stream 1 will involve a single-stage written application submission. Shortlisted applicants will subsequently be invited to prepare a pitch deck and present their proposal to the Steering Committee as part of the evaluation process.

In general, successful proposals are expected to:

- Address the thematic focus area identified by MISSION
- Propose a novel and differentiated scientific or technical approach that meaningfully improves upon the current standard of care with clear translational relevance
- Demonstrate a clear line-of-sight to downstream development opportunities and potential commercial impact, informed by the existing and emerging treatment landscape.

Applicants should also clearly articulate why the identified scientific or technical gap is worth addressing now, what translational option it unlocks, and what decision-enabling evidence will be generated through the project. Proposals should also demonstrate how the project will generate evidence that supports a continue, pivot, stop, or handoff decision.

Note: While priority will be given to proposals aligned with the thematic focus areas, exceptionally promising proposals outside these areas may also be considered where they demonstrate strong alignment with HHP MISSION's objectives and compelling translational potential.

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FAQ (6/6): Project level KPIs

Q: What are the project level KPIs/ expected outcomes for MISSION Stream 1?
A: MISSION Stream 1 projects are expected to articulate how they will contribute to the key objectives of MISSION: Generating tangible translational outputs (e.g validated targets, enabling platforms, candidate assets, prototypes, assays, datasets, algorithms) and commercialisable IP that merits downstream development.

HHP MISSION does not define commercial outcomes solely as products that are ready for clinical use or immediately profit-generating, but rather as outputs that credibly enable downstream translation and development beyond the 2.5 to 3 years of MISSION support.

Q: Are there any mandatory requirements for industry contributions?
A: No, there is no mandatory industry contribution for HHP MISSION Stream 1 funding scheme.

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Thank you

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