**SINGAPORE THERAPEUTICS DEVELOPMENT REVIEW 2023**

**PRE-PILOT STREAM 2 (PLATFORM DEVELOPMENT)**

**– CALL FOR FULL PROPOSAL**

**I. KEY INFORMATION**

**Project Title**:

*(Please note that the project title should be non-confidential as it might be shared publicly if your project is awarded for funding)*

**This Application Form is for STDR Pre-Pilot Stream 2: Platform Development**

**Total funds requested: S**$       
 *(inclusive of indirect costs)*

**Principal Investigator (PI) (contact point)**:   
Name :

Title :

Institution(s)\* :

Appointment(s)\*\* :

Percentage FTE# :

Business Email :

Business Phone :

Assistant Email :

*\* Please list primary institution, followed by other affiliated institutions*

*\*\* Please list primary appointment, followed by others*

*# Please submit a waiver request if total appointment time in public research institutions is <70%*

### Other Team Members

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Institution/Department/Lab\*** | **Business Email** |
| Co-I 1 |  |  |  |
| Co-l 2 |  |  |  |
| Collaborator\*\* |  |  |  |

*\*Department / lab / institution that will be managing grant \*\*Collaborators should not require grant funding*

|  |  |  |  |
| --- | --- | --- | --- |
| **Lead PI type** | PhD Scientist | Clinician | Clinician-Scientist |
| ***For PI who is a PhD Scientist*** | Do you have a clinical collaborator for this project?  Yes  No: Would you like to be linked up with a potential clinical collaborator, or a clinician to provide insights from a treatment perspective? **Yes/No** \* | | |
| ***For PI who is a Clinician/ Clinician-Scientist*** | Do you have a basic science collaborator for this project?  Yes  No: Would you like to be linked up with a potential PhD scientist collaborator, or a scientist who can provide insights from a basic biology perspective? **Yes/No** \* | | |

**Resubmission Status**

Please note that this will not affect the outcome of your proposal. This information would allow us to note the improvements you have made if this is a resubmission.

Is this your first submission to the STDR, Target Translation Consortium (TTC) or Platform Development (SMART) programmes? **YES / NO**

If No, which programme have you applied for previously: **TTC / SMART / STDR**

**II. INFORMATION FOR APPLICANTS**

|  |  |
| --- | --- |
| **Instructions** | * All text should be in Arial font, size 10, with single spacing. * Please submit your proposal as a PDF. Keep sections 1-13 to a maximum of 10-pages, *excluding* references, undertaking, Annex A (data and figures) and Annex B (Budget table). * It is mandatory for all applications to be submitted to, and endorsed by, the Host Institution's Industry & Enterprise Office (IEO) and Director of Research (DOR). * **Completed forms should be submitted electronically via iGrants** to the “Singapore Therapeutics Development Review 2022 (Sep) Pre-Pilot” between **11 September 2023** and **26 October 2023, 1700 hrs.** |
| **Eligibility Criteria** | * Applicants are required to fulfill the following criteria at the point of application:   The Lead Principal Investigator (PI) should:   1. Hold at least a 0.7 FTE primary appointment in a Singapore publicly funded research or tertiary institution\*; 2. Have the relevant scientific/technical background and necessary experience to direct the project being supported by the grant\*\*  * Exceptions to eligibility criteria will be considered on a case by case basis with the submission of a waiver request. Please write to the grant secretariat at least one week **before** the submission of your application, at least 7 days before the grant deadline on 26 October 2023, i.e. 19 October 2023.   *\*For joint appointees, total appointment time in Singapore publicly funded research or tertiary institutions should be at least 0.7 FTE.*  *\*\* Post-doctoral researchers who wish to apply for STDR should submit a letter from their supervisor, as part of the application submission on iGrants, declaring that*   1. *The supervisor supports the post-doctoral researcher's STDR application,* 2. *The contract of the post-doctoral researcher covers the entire STDR grant period, and*   *The grant body that is funding the post-doctoral researcher is agreeable to their application for STDR grants (if relevant).* |
| **Confidential Information** | Relevant privileged or confidential information should be disclosed if necessary, to convey a better understanding of the project. However, such information must be clearly marked as “Confidential” in the proposal and if so, will be handled as confidential information by the grant administrators. |

**III. CONTACT PERSONS FOR QUERIES**

Please write to **Dr Howard Califano** [**howard.califano@smart.mit.edu**](mailto:howard.califano@smart.mit.edu)and/or **Mr Brian Yen** **brian.yen@smart.mit.edu** if you have any questions about this programme or to arrange a pre-submission consultation for your platform project.

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# Pre-Pilot Stream 2 (Platform Development)

# 1. Executive Summary (Non-confidential) Do not disclose any proprietary information in this executive summary. Briefly describe the problem to be solved, the shortcomings of existing treatments and your proposed approach. Do not focus on the technical details. Assume minimal knowledge in the field or industry. *Keep within 250 words.*

# 2. Opportunity

Provide an overview of your platform technology and answer the WHY, WHAT and HOW. WHY is your approach so compelling? WHAT “pain point” are you attempting to address. HOW will it impact many compelling medical indications?

# 3. Commercialization

What do you envision to be the key next step to making an impact with this platform innovation? What is the time frame? Describe the technical and market uncertainty and risks that might be preventing this idea from proceeding along that path. At this point what is the first application you envision for the platform? What would be the market for this application?

# 4. Impact

What are the potential applications for your platform and its impacts? Can you create a list of potential impact areas?

# 5. Prior Art

What are the alternative or competing technologies? Elaborate on the benefits of the proposed platform approach over current or competitive approaches (even if the competitive approaches are not technically similar). To the best of your knowledge, what is the prior art in this area – by you and others? *List publications, patents, and patent disclosures.* Comment on the novelty of your proposal with respect to this prior art. Comment on the IP implications of this prior art; for example, will other patents have to be licensed in order to practice your technology? Please comment on whether this is an extension of existing research or something totally new for your team.

**6. Background IP**

Please provide a list of Invention Disclosures filed that you and the other Investigators plan to use or further reduce to practice utilizing the grant funds or that would be needed for the eventual commercialization.

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| --- | --- | --- | --- | --- |
| Project Title | Lead PI | Invention Report No | US PRV No  (If any) | PCT No  (If any) |
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|  |  |  |  |  |

**7. Supporting Data**

There must be data showing Proof-of-Principle or Proof-of-Concept for your platform technology. Please provide a summary of this data with your application. The stronger the technical support the more likely the application will be selected. Use Annex A to add supporting data and figures to show Proof-of-Principle or Proof-of-Concept for your platform technology.

# 8. Research Plan

Describe a research plan including the strategy and key experiments to be undertaken to address the goals of proposed work. What are the key questions that need to be answered to support the platform technology and to demonstrate at least one potential application? You should explain how the experiments and data you gather will do so.

# 9. Milestones and Deliverables

|  |  |
| --- | --- |
| **Date** | Milestone |
|  | [Elaborate on 3-4 milestones that can be used to evaluate progress through the project, and include a timeline.] |
|  |  |
|  |  |

Additionally, list the expected deliverables that you propose to achieve *within the proposed timeline of the grant* and at the end of the project– code, prototype, data proving feasibility, etc.

# 10. Resources and Budget

Summarize resources you require to complete the project. Because of the limited funds available and the number of proposals we expect, budgets will be scrutinized carefully, and entrepreneurial frugality is encouraged. Term of funding should not exceed one year. *Attach detailed budget and justification as* ***Annex B****.*

# 11. Funding

Have you sought other sources of funding? Please identify other sources of funding that have been used, or might be used to co-fund this work. Have you applied previously for an Innovation Centre grant?

# 12. Team and Collaborations

List team members and collaborators and describe their relevant experience and roles in the project. Identify areas of talent needed now and anticipated towards the end of the project term.

# 13. Suggested reviewers

Suggest at least three independent scientific reviewers, preferably not all in your department or lab. Please keep in mind that they should not have any conflict of interest with this work. Additional external reviewers also are welcome. Optional: please indicate if there is anyone you would prefer not to receive a copy of this proposal. ***Please include the title, email, and phone number.***

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Reviewer | Title | Business Email | Business Contact |
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**NOTE: Please ensure the reviewers are willing to write the review as the project will be disqualified if no reviewers reply.**

# 14. References *(this section is excluded from the 10-page limit)*

**UNDERTAKING**

**A. Undertaking by Principal Investigator and Co-Principal Investigators**

In acknowledging this Grant Application, the Principal Investigator and Co-Investigators [on behalf of the team] UNDERTAKE, on any Grant Award to:

* Declare that all information is accurate and true.
* Ensure that approval from the funding agency has been obtained before engaging in any commercial activity that will exploit the finds of the research funded by the funding agency
* Read, support and agree to this proposal being carried out in the Institution(s)
* Be actively engaged in the execution of the research and ensure that the study complies with all laws, rules and regulations pertaining to animal and human ethics, including the Singapore Good Clinical Practice Guidelines
* Not send similar versions or part(s) of this proposal to other agencies for funding.
* For Biomedical Science proposal, submit supporting documents of ethics approval obtained from the relevant Institutional Review Board (IRB) and Animal Ethics Committee for studies involving human subjects/human tissues or cells, and animal/animal tissues or cells respectively.
* Ensure that all necessary licenses and approvals have been obtained or are being sought
* Ensure that funding agency is acknowledged in all publications.
* Ensure that all publications arising from the research is deposited in the Institution’s open access repository (or any other institutional/subject open access repository), in accordance to the Institution’s open access policy.
* Ensure that the requested equipment/resources are not funded by another agency or research proposal.
* Ensure that there is a reasonable effort in accessing available equipment/resources within the Institution(s) or elsewhere within Singapore.
* Ensure that there is no financial conflict of interest
* Adhere to the funding agency's Grants Terms & Conditions (T&Cs) and Funding Guidelines, as well as all other applicable guidelines, policies and procedures adopted by the funding agency, which may be amended or varied from time to time;
* Comply with the provisions of any relevant laws of the Republic of Singapore, statutes, regulations, by-laws, rules, guidelines and requirements applicable to it; and
* Agree to hold primary responsibility for the responsible conduct of research, and shall abide and comply with the ethical, legal and professional standards relevant to research, in accordance to the research integrity policy of the Institution(s).

We declare that the facts stated in this application and the accompanying information are true. This is an original and latest version of the proposal. We also declare that no other

versions of this proposal (or parts thereof) with similar objectives, scope, deliverables or outcomes have been or will be submitted to any other funding bodies.

**Principal Investigator (PI):**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | | |
| **Designation:** |  | **Institution:** |  |
| **Signature\*:** |  | **Date:** |  |

*\* Electronic signatures are acceptable*

**Co-Investigator(s):**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | | |
| **Designation:** |  | **Institution:** |  |
| **Signature\*:** |  | **Date:** |  |

*\* Electronic signatures are acceptable*

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | | |
| **Designation:** |  | **Institution:** |  |
| **Signature\*:** |  | **Date:** |  |

*\* Electronic signatures are acceptable*

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| --- | --- | --- | --- |
| **Name:** |  | | |
| **Designation:** |  | **Institution:** |  |
| **Signature\*:** |  | **Date:** |  |

*\* Electronic signatures are acceptable*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **B. ENDORSEMENT BY Innovation & ENTERPRISE OFFICE(s) (IEO)**  To be completed by the Innovation & Enterprise Office(s) (IEO) (or equivalent) of the institution(s) of the **Principal Investigator (PI).**   |  | | --- | | **Specific Comments (if any)**: | |  |   **The PI’s Innovation Industry & Enterprise Office (IEO) supports this proposal and indicates that the foreground IP developed under this project and any necessary background IP are not encumbered.**   |  | | --- | | **Specific Comments for foreground and background IP (if any)**: | |  |  |  |  |  |  | | --- | --- | --- | --- | | **Name:** |  | **Email:** |  | | **Designation:** |  | **Institution:** |  | | **Signature\*:** |  | **Date:** |  |   *\* Electronic signatures are acceptable* |

**C. UNDERTAKING BY head of LEAD institution**

To be completed by the Director of Research (or equivalent) of the institution:

|  |
| --- |
| **Specific Comments (if any)**: |
|  |

**In signing this Application, the Host Institution undertakes to:**

* Confirm the accuracy and completeness of the information submitted.
* Ensure that the applicant is independently salaried by the institution for the entire period of the grant.
* Ensure that the budget is appropriate and reasonable (e.g., no double funding/excessive purchase of equipment), and is aligned with the Host Institution’s HR and other policies.
* Ensure that the proposed research will be conducted in the Host Institution.
* Provide adequate resources to the applicant for the entire grant period (e.g., lab spaces, mentorship and career development support).
* Ensure that the funds provided are used for appropriate purposes.
* Ensure that the study complies with all laws, rules and regulations pertaining to national and the institution’s research operating procedures and guidelines.

**The Institution supports this proposal.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | | |
| **Designation:** |  | **Institution:** |  |
| **Signature\*:** |  | **Date:** |  |

*\* Electronic signatures are acceptable*

**Annex A: Data and Figures**

**Annex B: Budget Table**

Please note that

* The STDR Pre-Pilot Grant will provide support for up to 12 months. While the total maximum grant amount is S$100,000, the estimated research funding available to the investigator is about S$76,900 after deducting institutional overheads.
* Equipment purchases are not fundable.
* The budget below is indicative and may be revised depending on the final workplan defined for projects selected for funding.

|  |  |
| --- | --- |
| **Category** | **Budget for 12 months** |
| **Manpower** | (Please list position and duration for hire. Note that PI’s salary is not supportable) |
| **Other Operating Expenses** | Consumables:  Services (outsourced services are allowed):  Others: |
| **TOTAL** | (Should not exceed S$76,900)  S$\_\_\_\_\_\_\_\_\_\_\_\_\_ |