**NUCLEIC ACID THERAPEUTICS INITIATIVE (NATi)**

**PROPOSAL FORM**

**Instructions**

* Use the template below to prepare your application. All sections must be completed.
* Use Arial 10, single spacing throughout.
* Guiding instructions are provided in grey and italicised fonts. These can be removed to provide more room for the proposal.
* All documents must be in Word or PDF format. Do not submit scanned PDFs except for signatories.
* Relevant privileged or confidential information should be disclosed to help convey a better understanding of the project. Such information should be clearly marked in the proposal.
* The Director of Research (DOR) from the Lead Investigator's Host Institution must endorse the proposal submission. The email endorsement must be attached to the application.
* All budgets are to be calculated in Singapore dollars.
* Submit completed applications to enquiry@nati.sg by the deadline.

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| --- | --- |
| **Section** | **Description** |
|  | Project Title |
|  | Details of Applicants (Project Team) |
|  | Total Budget Requested |
|  | Duration of Project (Months) |
|  | Lay Abstract  |
|  | Scientific Abstract |
|  | Significance and Potential Impact of Project |
|  | Detailed Research Proposal |
|  | Deliverables  |
|  | Key Performance Indicators and Tracking Indicators |
|  | Contribution of Project Team |
|  | Budget Request |
|  | Other Funding Support |
|  | Background Intellectual Property (BIP) |
|  | Foreground Intellectual Property (FIP) |
|  | Declaration of Ethics |
|  | Curriculum Vitae (CV) |
|  | Undertaking |

1. **PROJECT TITLE**

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| **Proposal Call Code:** *e.g. N01* |

1. **DETAILS OF APPLICANTS (PROJECT TEAM)**
* *The Lead Investigator will coordinate research activities carried out by the project team. He/She will be responsible for all progress reporting on behalf of the project team.*
* *Team Leads will be the representative(s) leading the research at the Partner Institution.*
* *Co-Investigators(s) (Co-Is) will be the person(s) leading and managing a particular workstream in collaboration with the Lead Investigator or Team Lead within the same institution.*
* *Collaborator(s) refers to any company, institution or incorporated body who are engaged in the research in collaboration with the Lead Investigator or any Co-Is.*
* *Funding will be awarded to Singapore public sector research performers only. Collaborators do not receive funding.*
* *Leads and Co-I(s) should hold a primary appointment in a Singapore publicly funded institute or institute of higher learning (IHL). The lead investigator must hold a primary appointment of at least 0.7 FTE in Singapore.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Host Institution /Partner Institution/ Organisation** | **Email Address** |
| **Lead Investigator** |  |  |  |
| **Team Lead** |  |  |  |
| **Co-Investigator (Co-I)** |  |  |  |
| **Collaborator** |  |  |  |

*Add rows as required.*

1. **TOTAL BUDGET REQUESTED**

*Ensure the budget numbers tally with the proposal budget template. Refer to the specific Call for Proposals for the maximum funding quantum. The project team is strongly advised to budget prudently and according to the needs of the proposed work*.

|  |  |
| --- | --- |
| **Direct cost** | S$ |
| **Indirect cost (30% of direct cost)** | S$ |
| **Total cost (Direct cost + Indirect cost)** | S$ |

1. **DURATION OF PROJECT (MONTHS)**

*Refer to the specific Call for Proposals for the maximum funding duration.*

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1. **LAY ABSTRACT**

*In no more than 300 words, provide a general and non-confidential description of the proposal which can be easily understood by an audience of experts from other subject domains. Content may be released publicly for the purpose of announcing results of the Call for Proposals.*

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1. **SCIENTIFIC ABSTRACT**

*In no more than 500 words, outline the specific scientific aims, hypotheses, methodology and approach of the proposal, including how the problem statement(s) will be addressed and resolved.*

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1. **SIGNIFICANCE AND POTENTIAL IMPACT OF PROJECT**

*In no more than 1 page, explain the significance and potential impact of the proposed project. You may refer to the guiding questions below:*

1. *What are the tangible deliverables expected at the end of the project? (e.g. more cost-efficient workflows to enable faster translation in Singapore, new core capability to scale up production for drug candidates, safer/more efficacious drug profile, etc)*
2. *How is it different from what is currently commercially available?*
3. *How can/will the deliverables be commercialised?*
4. *What is the value capture for Singapore?*
5. **DETAILED RESEARCH PROPOSAL**

*In no more than 3 pages, summarize your hypotheses and methodologies, emphasizing the originality and criticality of your approach. Proposals will be assessed based on their ability to contribute to NATi’s stated goals of developing a clinically impactful and economically feasible nucleic acid therapeutic. Ideal proposals will demonstrate not only high-quality innovative science with detailed methodology highlighting novelty of concepts and appropriate allocation of requested budget but also well-articulated potential for adoption to demonstrate knowledge of the competitive landscape and differentiating factors. Provision of preliminary data (as an annex) is strongly encouraged.*

1. **DELIVERABLES**

*Using the provided Gantt chart template as a reference, outline the major stages of the project, each representing a distinct phase with specific goals. Within each stage, define the workstreams required to produce measurable deliverables and shade the boxes to represent the duration of each workstream. Each workstream should result in a tangible output, such as a prototype, functional algorithm, or validated assay.*

*Continuity of NATi-funded projects is determined through go/no-go decisions at each stage-gate meeting. Propose a stage-gate committee assembled from selected members from the project team. For avoidance of doubt, each stage-gate meeting will be chaired by NATi. For each stage gate, propose clear criteria for go/no-go criteria, where the stage-gate committee will evaluate the effectiveness of the deliverables.*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Deliverables** | **Party responsible** | **Y1****Q1** | **Y1****Q2** | **Y1****Q3** | **Y1****Q4** | **Y2****Q1** | **Y2****Q2** | **Y2****Q3** | **Y2****Q4** | **Y3****Q1** | **Y3****Q2** | **Y3****Q3** | **Y3****Q4** |
| **S/N** | **Stage 1** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.1 | Workstream *e.g. Sequence design & synthesis* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.2 | Workstream *e.g.. Delivery modality design & synthesis* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stage 1 | *Stage 1 Deliverable* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **S/N** | **Stage 2** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.1 | Workstream *e.g in vitro toxicity assay* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.2 | Workstream *e.g in vitro stability assay* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stage 2 | *Stage 2 Deliverable* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **S/N** | **Stage 3** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.1 | Workstream *e.g in vivo distribution* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.2 | Workstream *e.g in vivo efficacy* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stage 3 | *Stage 3 Deliverable* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Annual Report |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Final Report |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |
| **Stage Gate Go/No-Go Criteria** | **Stage Gate Committee** |
| **Stage Gate 1** | 1. *E.g. A viable delivery system has been identified that effectively transports to the target cells or tissues.*
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| **Stage Gate 2** | 1. *E.g. Toxicity and stability assays have been thoroughly assessed and have identified 2 formulations for in vivo models.*
 |  |
| **Stage Gate 3** | 1. *E.g. Distribution and efficacy profiles of the shortlisted candidates have been obtained.*
2. *E.g. Achieve at least 1 viable asset with proven efficacy and targeted delivery.*
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1. **KEY PERFORMANCE INDICATORS AND TRACKING INDICATORS**

*Include proposed key performance indicators and tracking indicators where applicable.*

|  |  |  |
| --- | --- | --- |
| **S/N** | **Key Performance Indicators** | **Proposed Target (S$)** |
| 1. | Industry R&D spending (IRS) |  |
| **S/N** | **Tracking Indicators** | **Proposed Target** |
| 2. | Number of spin-offs |  |
| 3. | Number of out-licensing deals |  |
| 4. | Number of industry projects |  |
| 5. | Number of talents trained |  |
| 6. | Number of patents filed |  |
| 7. | Number of technical disclosures filed |  |
| 8. | Number of international collaborations |  |

**Projection for Industry R&D Spending (IRS)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Company** | **Estimated Cash****($)** | **Estimated In-kind ($)** | **Status of Discussion** |
|  |  |  |  |
|  |  |  |  |

*Provide documentation to demonstrate industry support and/or commitment.*

*Add rows as required.*

1. **CONTRIBUTION OF PROJECT TEAM**

*The percentage effort of work commitment of the individual team members must add up to 100%. Identify any synergies and provide a conflict management plan if applicable. Indicate the role and contribution of each team member specifically Lead Investigator, Co-Investigators, Team Lead and Collaborators.*

|  |  |  |
| --- | --- | --- |
| **Name** | **Contribution** | **% Effort** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | 100% |

*Add rows as required.*

1. **BUDGET REQUEST IN SINGAPORE DOLLARS**
2. *Provide a summary of the budget request for each institution.*
3. *A detailed breakdown of the budget requested using the “Proposal Budget Template” must accompany the proposal submission.*
4. *Researchers from overseas institutions and industry/companies can only participate as collaborators. No funding can be awarded to these collaborators. They may contribute technology or in-kind in terms of manpower, time or other resources.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Institution:**  | **Institution:**  | **Institution:**  | **Institution:**  |
| **EOM** |    |   |   |  |
| **OOE** |    |   |   |  |
| **EQPT** |    |   |   |  |
| **OT** |  |  |  |  |
| **Direct Cost** |    |   |   |  |
| **Indirect cost**(30% of direct cost) |    |   |   |  |
| **Grand Total** |    |   |   |  |

1. **OTHER FUNDING SUPPORT**

*Using the template below, provide the details for all currently held or applied grants over the last 3 years preceding this application by the project team which are relevant to the proposed research. Highlight any potential overlap of funds with this application and mitigating measures. Note that double-dipping is not allowed.*

|  |
| --- |
| ***Currently held grants by (Name of Investigator)*** |
| 1. | Project Number/ID |  |
| Funding Agency |  |
| Project Title |  |
| Project Scope |  |
| Project Progress (%) |  |
| Total Amount Awarded |  |
| Project Start/End Date |  |
| Project Role |  |
| Potential overlap |  |

*Add table as required.*

|  |
| --- |
| ***Grant applications pending outcome by (Name of Investigator)*** |
| 1. | Funding Agency |  |
| Project Title |  |
| Project Scope |  |
| Total Amount Applied |  |
| Project Start/End Date |  |
| Project Role  |  |
| Potential overlap |  |

*Add table as required.*

1. **BACKGROUND INTELLECTUAL PROPERTY (BIP)**

List the relevant patents, publications and technology disclosures which constitute BIP and Background Know-How which may potentially be required for the use, licensing or commercialisation of Foreground Intellectual Property or Foreground Know-How. Highlight any potential encumbrance or limitation in freedom to operate. Include any existing or planned licensing agreements with industry collaborators or others.

|  |  |  |
| --- | --- | --- |
| **S/N** | **BIP**  | **Details**  |
| 1. |  |  |
| **S/N** | **Background Know-How** | **Details** |
| 1. |  |  |

*Add rows as required.*

1. **FOREGROUND INTELLECTUAL PROPERTY (FIP)**

*List the potential FIP or commercialisation activities which will be generated through this project. Attach any licensing agreements/options for FIP.*

|  |  |  |
| --- | --- | --- |
| **S/N** | **Potential FIP**  | **Details**  |
| 1. |  |  |
| **S/N** | **Potential Commercialisation Activities** | **Details** |
| 1. |  |  |

*Add rows as required.*

1. **DECLARATION OF ETHICS**

*Using the template below, indicate if the research involves ethical considerations. Note that the approval of the proposal is subject to the necessary ethics approvals.*

|  |  |
| --- | --- |
| Please check the box Yes or No if the project involves any of the following: | Please declare the participating institution(s) where the study requiring ethics approval is/are conducted: |
| a) | Human Subject | [ ]  Yes [ ]  No |  |
| b) | Use of human biological materials (HBM) | [ ]  Yes [ ]  No |  |
| c) | Conduct tissue banking activities regulated under the Human Biomedical Research Act (HBRA) | [ ]  Yes [ ]  No |  |
| d) | Use of health information or research data from primary donors | [ ]  Yes [ ]  No |  |
| e) | Use of commercially available HBM/animal tissues or cells | [ ]  Yes [ ]  No |  |
| f) | Animal experimentation not regulated under HBRA | [ ]  Yes [ ]  No |  |
| g) | Requirement for Class 2 containment and above | [ ]  Yes [ ]  No |  |
| h) | Multi-centre trials | [ ]  Yes [ ]  No |  |
| i) |  | [ ]  Yes [ ]  No |  |
| A copy of the ethics approval is attached | [ ]  Yes [ ]  No |  |

1. **CURRICULUM VITAE (CV)**

*Attach the CVs of all Investigators and Collaborators using the template below. Each CV should not exceed 1 page*.

|  |  |
| --- | --- |
| Name |  |
| Current position/appointment(s)/affiliation(s) |  |
| ORCID |  |
| Position(s) in a company/companies |  |
| Employment history in the last 15 years |
| Academic qualifications |
| Relevant publications (list up to 10 with corresponding journal impact factor) |
| Relevant project management experience |
| Key research achievements (licenses, awards, spin-off companies, external consultancy, etc) |
| Patents held |

*Add table as required.*

1. **UNDERTAKING**

In signing this application form, the project team undertakes to:

1. Declare that all information provided is accurate and true to the best of their knowledge
2. Ensure that there is no financial conflict of interest
3. Be actively engaged in the execution of the research and ensure that the associated activities comply with all laws, rules and regulations pertaining to animal and human ethics
4. Ensure that all necessary licenses and approvals have been obtained or are being sought
5. Adhere to the prevailing Grant Terms and Conditions and Guidelines of the funding agency which may be amended from time to time
6. 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 with the research integrity policy of the respective Institutions
7. Avoid sending similar versions or parts of this application/proposal to other agencies for funding
8. Ensure that the requested equipment/resources are not funded by another agency or proposal
9. Ensure that the funding agency is acknowledged in all publications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Name** | **Institution** | **Signature** | **Date** |
| **Lead Investigator**  |  |  |  |  |
| **Co-Investigator** |  |  |  |  |

*Add rows as required.*

*Electronic signatures are acceptable.*