

## **NTU – Tohoku Joint Seed Fund Guidelines**

### **NTU – Tohoku Collaboration**

NTU and Tohoku Universities, both renowned for their excellence in research, innovation, and education, are leaders in advancing knowledge and addressing global challenges. Nanyang Technological University (NTU), Singapore, is recognized for its interdisciplinary research strengths in areas such as artificial intelligence, sustainability, and advanced materials, fostering strong ties with industry and global institutions. Tohoku University (Tohoku), Japan, is distinguished by its pioneering contributions to science, technology, and engineering. Its long-standing commitment to societal impact and academic excellence has solidified its position as a premier research hub in Asia.

Bringing together their complementary strengths, NTU and Tohoku University wish to support collaborative efforts of their researchers through a joint seed fund initiative. This partnership reflects a shared vision of promoting interdisciplinary research, fostering innovation, and addressing pressing global issues, while deepening academic ties between our institutions.

Expected outcomes:

- a. Access to Resources: Collaborative projects can pool resources, including funding, facilities, and expertise, leading to more comprehensive research outcomes. The seed funding will allow the partners to develop foundations to target to apply for bigger grants in the near future.
- b. Interdisciplinary Approaches: Collaboration across different fields can foster innovative research that addresses complex problems from multiple perspectives. Collaboration is expected to foster networking among faculty, researchers, and students, creating opportunities for mentorship and professional growth. Collaborations will see translation of research findings into practical applications, benefiting industries and society as a whole.
- c. Access to Industry Partnerships: Joint efforts can attract industry partners interested in collaborating on research and development initiatives. Building on the seed fund projects the ambition is to connect the two universities with industry partners to establish new connections and potentially new funding opportunities.

**The fund supports the pursuit of new research or innovation collaborations between NTU and Tohoku on specifics set out in Section 1 of this document.**

The NTU- Tohoku Joint Seed Fund coordinators are:

- At Tohoku by the Research Promotion Department (contact: [kenkyo-kikaku@grp.tohoku.ac.jp](mailto:kenkyo-kikaku@grp.tohoku.ac.jp) )
- At NTU by the Office of International Engagement (contact: [International@ntu.edu.sg](mailto:International@ntu.edu.sg)).

## **Specifics of the Tohoku - NTU Joint Seed Fund**

### **1 Topics of Interest**

Proposals from all fields are welcome but those related to the following fields are particularly encouraged:

1.1 Electrical and Electronic Engineering (including Machine learning, Power Electronics and drives, Photonics, Power system, etc.)

1.2 Mechanical and Aerospace Engineering (including Industrial AI, Digital Twin, etc.)

1.3 Life Sciences (including medicine, bioengineering, and smart agriculture, etc.),

1.4 Energy, Environment, and Resource circulation.

Within these overarching fields, an interested researcher from one partner should connect with a **Principal Investigator or Lead Collaborator** at the other partner.

### **3. Funding Amount**

3.1 Subject to a total funding of SGD 60,000 (or the JPY equivalent) from each partner, the Tohoku - NTU Joint Seed Fund will be allocated as follows:

- a. 'Electrical and Electronic Engineering' fund: up to SGD20,000 (or JPY equivalent) from each partner
- b. 'Mechanical and Aerospace Engineering' fund: up to SGD20,000 (or JPY equivalent) from each partner
- c. 'General Fund': up to SGD20,000 (or JPY equivalent) from each partner for any other field.

3.2 Amount per successful applications

- a. A maximum of 6 projects will be funded under the Seed Fund, with each proposal funded for a maximum of SGD \$10,000 (or the JPY equivalent) from each partner.
- b. Unless otherwise stated, each successful application in the fields indicated shall receive up to SGD 10K (or its JPY equivalent) from each partner, with a total of up to SGD 20K (or JPY equivalent).
- c. Each partner shall have sole and exclusive ownership and control over its own funding, and such funds shall be allocated and utilized solely for the benefit of its designated faculty and/or researchers, unless otherwise expressly provided.
- d. The Seed Grant Program will run for one year and will then review by the Parties.

### 3. Use of Funds

a. The Seed Fund may be used for the following purposes:

- i. Travel costs (including accommodation) incurred by Applicants or researchers from their labs for the purpose of carrying out the project, and costs associated with hosting PhD students and researchers
- ii. Hosting of local symposiums and/or workshops
- iii. Small pilot studies
- iv. Research activities costs such as, data collection, software, database, publication, and consumables. In the case of consumables, this should not exceed 20% of the total budget
- v. Conference fees for Principal Investigator, Lead Collaborator, or Co-Investigator(s), postdocs, and student researchers (Masters and PhD) engaged in the joint project
- vi. Honorarium for student assistants involved in the research.

b. The Seed Fund may NOT be used for the following purposes:

- i. salaries, equipment, scholarships, and tuition fees.

### 4. Eligibility

a. Each application must be jointly submitted by two universities, designating **one Principal Investigator** and **one Lead Collaborator**, with each representing their respective institution.

b. Principal Applicants on each side must be tenure-track or tenured faculty member of NTU or permanent / fixed-term academic staff of Tohoku. Adjunct/Honorary staff members whose home university is neither NTU nor Tohoku are not eligible to be lead-investigators but can be listed as further co-investigators.

c. Each initiative will normally be eligible for only one round of seed fund.

d. Activities already fully funded via other sources are not eligible for support.

### 5. Project Duration

Twelve (12) months from the date of the project award.

### 6. Joint Seed Fund Timeline:

Stage	Key Date
Application open	8 September
Application close	17 October
Internal Evaluation by respective universities	24 October -21 November
Partners share reviewers' ranking and scores	28 November
Joint Panel (NTU and TU) Discussion on Projects Evaluation	3 December
Results Announcement to Awardees	22 December
Projects start	30 December
Projects end	29 December following year

## 7. How to Apply

- a. Applications for proposals will be accepted if they are jointly signed and submitted by **one Principal Investigator** (from either NTU or Tohoku) and **one Lead Collaborator** (from the partner university), using the “NTU–Tohoku Joint Seed Fund Application Form”
- b. **Each Principal Investigator or Lead Collaborator** may submit only one project proposal per cycle, with no exceptions for multiple submissions.
- a. Each application must include the following information and supporting documents, where applicable
  - i. NTU – Tohoku Joint Seed Fund Application Form
  - CVs of the Principal Investigator and Lead Collaborator, including selected publications
- b. A single joint application should be submitted jointly by Tohoku University and NTU PIs, in a single PDF file via the NTU RISE platform AND ([kenkyo-kikaku@grp.tohoku.ac.jp](mailto:kenkyo-kikaku@grp.tohoku.ac.jp)) with the subject title “NTU-Tohoku Joint Seed Fund Proposal Submission”

## 8. Evaluation Criteria of the Tohoku - NTU Joint Seed Fund

Projects will be evaluated on the following criteria (with equal weighting):

- a. Technical Merit: i.e. the importance/novelty of the project within its field or in terms of the challenges it seeks to address.
- b. Strategic merit/alignment: The selection committee will be guided by these considerations:
  - i. How the project advances the interests of both institutions.
  - ii. A clear case of complementarity/synergy between the proposed applicants (the whole project outcomes being greater than the sum of its parts);
  - iii. Funding potential (the ability to produce a convincing roadmap for future funding);
  - iv. Potential for the project to include relevant third parties (e.g. commercial, governmental and non-governmental organisations) for greater impact.
  - v. Extent of PhD students and early-career researchers' involvement in the project.
- c. Joint capacity: i.e. the standing and track record of the academics involved, and the evidence of their shared commitment to achieving the aims of the project.

## 9. Evaluation Process of the Tohoku - NTU Joint Seed Fund

### a. Initial Screening:

- i. On receipt of Proposals the Research Promotion Department Officer (Tohoku) and the NTU Research Support Office (NTU) conduct an initial screening to ensure all applications meet the basic eligibility criteria and submission requirements.

### b. Reviewers Evaluation:

Each institution will appoint internal reviewers to review the proposals:

- i. Tohoku Reviewers are composed of the Executive Vice President for International Research Strategy of Tohoku University and members appointed by them.

- ii. NTU Reviewers will be appointed by the Head of the School/Unit providing the funding.

c. Scoring and Ranking:

- i. At Tohoku, each proposal will be reviewed by several reviewers appointed by the Executive Vice President for International Research Strategy of Tohoku University.
- ii. At NTU, each proposal is reviewed by three NTU Reviewers, who will provide scores and constructive comments within four weeks via the online review form

d. Exchange Reviewers' Ranking and Scores:

The Institutions will exchange the reviewers' ranking and scores on an agreed date. NTU will collate the data and clearly mark the recommendations for the Joint Panel before the Panel meets.

e. Joint Panel Meeting:

The Joint Panel meets online to discuss the top-ranked proposals. Panel members provide additional insights and may adjust scores based on the discussion.

\*Joint Panel Members

Each partner will appoint up to four joint panel members. An equal number to be appointed by each partner. Unless otherwise stated the Joint Panel Members are:

- i. Tohoku. Tohoku - The panel will be chaired by the Executive Vice President for International Research Strategy and composed of several reviewers appointed by the EVP
- ii. NTU
  - a. One Panel members to be appointed by the chair/ Dean of each participating school / college. The panel will be chaired by Vice-President (International Engagement)
  - b. As NTU funds are specific to and provided by the NTU participating colleges/schools/units, the NTU representative for the respective school/college shall make the final decision on the award of funds to their college/school PIs/projects, following discussion with the Joint Panel representatives.

f. Final Selection:

The proposals to be funded will be based on the panel's recommendations. In the case of Tohoku and where applicable, ensure a balanced distribution of funds across different disciplines and research areas where possible.

g. Notification and Feedback:

Applicants will be notified of the outcome of their proposals. If requested, provide constructive feedback to unsuccessful applicants to help them improve future submissions.

**10. Monitoring and Reporting:**

Funded projects are required to submit periodic progress reports as a condition of this award. The successful applicants are required to submit a progress report on the completion of the awarded project, as well as for an additional two (2) years following its completion, in the format shown in Appendix 1 to these Guidelines.

This procedure ensures a fair and transparent evaluation process, fostering high-quality research collaborations.

## **11. Intellectual Property**

Researchers participating in the Seed Fund project will be bound by the intellectual property terms as set out in the Memorandum of Agreement dated as per the effective date (MOA). Broadly the IP terms are as follows:

“Background IP” means Intellectual Property (not being Foreground IP) which is in or comes into the ownership or control of any Party separately and independently of the Collaborations, under which such Party is free to use and grant licences and which is expressly documented by the disclosing Party and disclosed to another Party pursuant to the Collaborations.

Each Party remains the owner or authorised user of all its Background IP and nothing in the agreement and guidelines save as specifically provided in the agreement, is deemed to grant impliedly or otherwise, ownership of or rights of use of such Background IP to the other Party.

It is agreed that no Party will be compelled to disclose any of its trade secrets or Confidential Information as part of its Background IP licensed in the agreement.

Each Party retains all rights, including copyright, in the intellectual property produced or contributed by its Authorised Representatives pursuant to the agreement.

Ownership of any intellectual property arising from the Collaborations (“Foreground IP”) shall be determined as follows:

- (a) TU solely developed Foreground IP will be owned by TU;
- (b) NTU solely developed Foreground IP will be owned by NTU;
- (c) Jointly developed Foreground IP will be owned by TU and NTU jointly.

If necessary, further terms relating to the shares, rights, protection and management of any Foreground IP may be included in a supplemental written agreement.

For the avoidance of doubt, in the event of any conflict between the intellectual property terms in the supplemental written agreement (if any), the MOA, and the Guidelines, the following order of precedence shall apply: (1) the supplemental written agreement (if any), (2) the MOA.

## **12. Acknowledgements**

Applicants will be required to engage with dissemination of the outcomes of their initiative, including presenting at a colloquium or other event organised by NTU and/or Tohoku following the completion of the initiative, as required.

Upon publication or presentation of any research or materials funded by the grant, the Principal Investigator, Lead Collaborator, and any Co-Investigator(s) shall ensure that all necessary acknowledgments and credits are made to the relevant parties, including, without limitation, the following for each:

- a. Principal Investigator / Lead Collaborator / Co-Investigator(s)
- b. Schools
- c. Institution
- d. University

## Appendix 1

### Joint Seed Fund Report Form

<b>Project Title</b>		
<b>Actual Start Date</b>	Click or tap to enter a date.	
<b>Actual End Date</b>	Click or tap to enter a date.	
	<b>Nanyang Technological University</b>	<b>Tohoku University</b>
<b>PRINCIPAL GRANT HOLDERS</b>		
Title and Name		
Faculty / School		
Department		
Email		
Telephone		
<b>Names of other researchers involved in the project (include designation (Prof, Dr. etc), full name and institutional affiliation)</b>		
1.		
2.		
3.		
4.		

<b>FINANCE SUMMARY</b>		
Please complete the table, and provide any additional comments regarding unplanned expenditure/underspend		
	<b>Nanyang Technological University (NTU PI to attach SAP statement)</b>	<b>University of Tohoku</b>
Total Funding Awarded	SGD	JPY
Total Spent	SGD	JPY

<b>SUMMARY OF KEY OUTCOMES</b>
Please provide an overview of the key outcomes of this project.

**SIGNIFICANT CHANGES**

Please comment on any significant changes that occurred compared to what was outlined in the proposal (e.g., changes in activities, changes in timeline, changes in participants, budget changes).

**FUNDING APPLICATIONS**

Please detail any funding applications emerging from this project that have been made to external organisations

*NB: Please be sure to include full details of the project title, funding agency, amount requested and status (i.e. indicate whether these have been funded, not funded or are under consideration by the relevant funding body)*

**RESEARCH OUTPUTS**

Please detail any publications emerging from this project

*NB: Please include any publications in progress or submitted for review*

**PLANNED FUTURE COLLABORATION**

Please outline planned collaborations and the anticipated timeframe for these.

**ADDITIONAL FEEDBACK (Optional)**

Please provide any additional feedback on your experience with this fund so that we may improve it for future rounds.

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Once completed, this form should be submitted by email to: [kenkyo-kikaku@grp.tohoku.ac.jp](mailto:kenkyo-kikaku@grp.tohoku.ac.jp) and [international@ntu.edu.sg](mailto:international@ntu.edu.sg)