



AMED-NHMRC 2024: Adopting Sustainable Partnerships for Innovative Research Ecosystem (ASPIRE)

Guidance for Applicants

1. Introduction and objectives

The Japan Agency for Medical Research and Development (AMED) and Australia's National Health and Medical Research Council (NHMRC) are working together to advance the development of research cooperation in health and medical research between scientists from Japan and Australia by means of collaborative research projects.

This joint AMED-NHMRC funding opportunity aims to provide funding for up to three (3) large-scale collaborative joint research projects which will strengthen networks and relationships between Japan and Australia, promote international mobility and circulation, and contribute to long-term collaborative networks. A key aspect of the successful research programs will be the establishment or enhancement of sustainable partnerships between Japan and Australia, supported through a strong mobility element to the available funding.

Through the AMED-NHMRC 2024 ASPIRE grant opportunity, AMED and NHMRC aim to:

- Support research on complex systems of living organisms to clarify the mechanisms of maintenance and breakdown of biological functions caused by these interactions.
- Support world-leading collaborative research teams that focus on basic research into cuttingedge fields of research relevant to the populations of both Japan and Australia.
- Enhance exchange of scientists between the two countries, particularly considering the
 development of the next generation of top researchers that will contribute to the promotion of
 international talent mobility.
- Establish a sustainable research network between the two countries, to exchange knowledge and methodologies, to strengthen strategic medical research relationships and to provide opportunities for collaborative research to generate further synergies.

1.1 AMED

AMED will support this activity under the ASPIRE (Adopting Sustainable Partnerships for Innovative Research Ecosystem) fund. It aims to provide sufficient funds for large-scale collaborative joint research projects in cutting-edge fields, to be conducted at the initiative of the Japanese government in collaboration with advanced countries with high standards of science and technology.

Through international research collaboration supported by this program, Japanese researchers will participate in the worldwide scientific top tier. The exchange of excellent researchers between Japan and partner country will also be strengthened. These researchers are expected to be





leaders in the next generation. This will promote international talent mobility and circulation and contribute to long-term collaborative networks.

To accomplish the research and development objectives mutually agreed upon by both countries, AMED will assign a Program Supervisor (PS) and a Program Officer (PO), who play a key role in advising and management of projects on the Japanese side.

1.2 NHMRC

Consistent with its <u>International Engagement Strategy</u>, NHMRC will provide funding for Australian components of the research proposals. The strategy supports collaborative approaches to health and medical research, including:

- participation in global organisations of funders to share information and foster collaboration on common goals.
- creation of opportunities for Australian researchers to collaborate internationally to enhance their expertise, capabilities and networks.
- collaboration with international funding partners on opportunities to address shared health priorities and build regional capacity.
- building strategic alliances with international funding bodies and government agencies to promote international best practice in research.

2. Research topic -System Complexity: Decoding the Spectrum of Disease

This program aims to elucidate the mechanisms underlying the maintenance and disruption of biological functions in complex systems. These systems encompass interactions at various levels, such as cell-to-cell, tissue-to-tissue, pathogen-host, and even human-human social relationships. Our comprehension of these complex systems is being augmented by state-of-the-art methodologies, including non-invasive biomedical measurement techniques and AI technologies for analysing large-scale complexity.

Potential research topics of interest include, but are not limited to:

- Analysing multi-omics data using artificial intelligence to understand complex biological mechanisms.
- Applying artificial intelligence to develop integrative models to identify new biomarkers and therapeutic targets.
- Understanding biological processes to make predictions about the behaviour of complex systems under different conditions.

In this call, we anticipate internationally leading research activities in this research topic. We encourage applications that emphasize the safe, ethical, equitable, and effective application of artificial intelligence and other emerging technologies in health and medical research, as well as in health care. Applications that focus on preventing and managing multimorbidity and chronic conditions are also welcomed.

3. Prospective Applicants

AMED and NHMRC invite researchers based in Japan and Australia to submit proposals for this call pertaining to research topic as described in section 2. This call for collaborative proposals will require a set of applicants (co-applicants) who will be serving as Principal Investigator and Chief





Investigators (CI) based in Japan and Australia to work in partnership on research projects. All Research Activities will be undertaken on a collaborative basis.

Eligibility to apply will be determined by respective national eligibility rules, as follows.

3.1 General Eligibility

Each application must include co-Cls from both Japan and Australia as part of the research team.

3.2 Eligibility for Japan-based co-applicants:

The Japan-based principal investigator (PI) must be affiliated with a domestic university or research institution in Japan where the proposed project will be carried out.

The mobility plan must include plans for researcher exchange: next-generation researchers from Japan must spend a minimum of 12 months in Australia, and researchers from the Australia-based team must be invited to Japan. Researchers who fall under either (i) or (ii) below are required to travel to the partner country. In addition, PIs, Co-PIs, and other research participants including undergraduate students may also travel.

There is no limit to the number of researchers who may travel, and PIs and Co-PIs may also travel as visiting researchers.

- (i) Students enrolled in a master's or doctoral course (master's or doctoral program)
- (ii) Researchers who, at the time of submission, have been conducting research activities at universities, public research institutions, etc. for 15 years or less after obtaining their doctoral degrees.

For further details, please refer to the AMED Call Supplemental Guidance for Japanese researchers which can be found on the AMED website.

3.3 Eligibility for Australia-based co-applicants:

All applications seeking funding from NHMRC must be submitted through an NHMRC-approved Administering Institution.

Chief Investigator A (CIA) must be an Australian or New Zealand citizen, or a permanent resident of Australia.

Refer to Section 4 Eligibility Criteria of the NHMRC-AMED 2024 ASPIRE Grant Guidelines.

4. Grant duration and financial support

In this collaborative research scheme, AMED and NHMRC will jointly fund up to three (3) proposals. The duration of a collaborative research project shall be up to five (5) years in total from the start date. AMED will provide support for researchers based in Japan, and NHMRC will support researchers based in Australia.

In total, 345 million JPY direct cost for up to 5 years (capped maximum value of 115 million JPY per project with further adjustment for project period shorter than 5 years) is provided by AMED in support of the Japanese researcher team and activities, and \$5 million AUD for up to 5 years (no maximum grant amount) is provided by NHMRC in support of the Australian researcher team and activities.





4.1 AMED (Japan based applicants)

Please refer to the AMED Call Supplemental Guidance for Japanese researchers which can be found on the AMED website.

Contract between Japan-based co-applicant and AMED

Support will be implemented in accordance with a contract for commissioned research which shall be entered into between AMED and the Japan-based co-applicant's Institution. For further details, please refer to the AMED Call Supplemental Guidance for Japanese researchers which can be found on the AMED website.

4.2 NHMRC (Australia based applicants)

4.3 Mobility Cost

It is required that 33% of the total requested funding (from both AMED and NHMRC) should be used for the purpose of building and expanding networks with the partner country and promoting mobility. These expenses can include the costs of organizing workshops/seminars etc, travel of researchers to the partner country and related expenses, personnel costs for staff involved in travel and exchanges, and research and other costs related to hosting researchers from the partner country. Please see table below for more detail.

Main Item	Definition
Research costs (equipment/supplies) when hosting researchers	Research facilities/equipment/prototypes, software (ready-made goods), purchasing costs for reagents/materials/consumables for use in research
Travel costs for personal exchanges and joint meetings	Travel costs of research participants, travel costs for invited participants such as external experts
Personnel costs/ services costs for expatriates	Personnel costs for those traveling: personnel costs for researchers, etc., employed to conduct the relevant contracted research (including personnel costs for Cls/Pls and Sub-Pls) and related costs e.g. interpretation/translation
Other costs for international partnership and mobility activities	Costs for implementing the relevant contracted research other than the above. Examples: conference costs, equipment leasing costs, Equipment repair costs and subcontract costs.
	Note: For applicants based in Australia, these costs must adhere to the NHMRC's Direct Research Costs Guidelines





5. Application

5.1 Common Application

The co-applicants from Japan and Australia shall work together to write a Common Application which includes a common research proposal and apply electronically as designated in 5.2 below.

5.2 Submission

All applications are to be submitted written in English.

The Japan-based applicants must submit the AMED-specified application forms (a Common Application and a Supplemental Application form) through the e-Rad application system no later than 16:00 Japan Standard Time on 28 August 2024. A Supplemental Application form must be written in Japanese.

Australia-based applicants must electronically submit their application forms using Sapphire (unless otherwise advised by NHMRC) by 17.00 AEST 29 August 2024. Australia-based applicants should also note that minimum data is due to be entered into Sapphire by 17.00 AEST on 14 August 2024. Further information is available at Section 7 of the <a href="https://www.nhmcc.new.nhm.com/nhmcc.nhmcc.nhm.com/nhmcc.nhm.com/nhmcc.nhmcc.nhmcc.nhm.com/nhmcc.n

6. Evaluation of Project Proposals

Reviewers are assigned by AMED and NHMRC for the evaluation of proposals. Based on the results of the evaluation, AMED and NHMRC will jointly make a common decision regarding funding of up to three selected proposals.

In the event that more than one application is ranked equal third for the funding following peer review, AMED will advise which application best meets the objectives and intended outcomes of the grant opportunity according to the information provided at Section 1.

6.1 Evaluation Criteria

Each proposal will be assessed against the following criteria;

1. Scientific merit and feasibility (20%)

- The proposed research aims and objectives are well-defined, coherent and the scientific approach is relevant to the scope of the research call
- The proposed research is original and novel
- The proposed research responds to significant health issues of both Australia and Japan
- The proposed research will advance knowledge/scientific discovery, develop science and technology in Australia and/or Japan
- The rationale and (where appropriate) hypotheses for the proposed research will lead to outcomes of international significance

2. Design and methods (20%)

• Successful project completion is feasible given that all of the required expertise, research tools and techniques are present in the relevant research environment(s).





- The proposed study design establishes clear goals that will achieve objectives within stated timeframe and budget.
- Mobility costs are justified for both Australia and Japan researchers
- The methods and proposed analyses are comprehensive and appropriate.
- Design and methods facilitate synergies based on common interests and agendas that can only be achieved through bilateral cooperation and engagement
- Ethical considerations, including bioethics and safety, are considered for both Australia and Japan

3. Expertise of the research team (30%)

The Australia-Japan research teams collectively possesses:

- Academic qualifications (where relevant), topic-based knowledge and experience to undertake the proposed research
- A publication track-record relevant to the proposed research as well as other professional publications, and/or experience in disseminating research results
- Experience in relevant research communities with the co-investigators from the foreign institution, and experience in human resource development of next generation researchers
- composition of the research team that will achieve the project objectives and generate outcomes
- Early to next-generation researchers who are contribute to the overall team quality and capability

4. Quality of the research partnership, including mobility plan (30%)

- The division of roles between the Japan-based and Australia-based research teams is clear throughout the proposed research
- The partnership will promote and sustain comprehensive working collaborations and mobility between Australia and Japan.
- The governance structure and the added value for the partnership is evident.
- The mobility plan is comprehensive and appropriate for the project aims.
- Plans for capacity building next-generation researchers are defined for both Australia and Japan.

7. Announcement of Funding Decision

Funding decisions are expected to be made by January 2025 with a joint announcement by February 2025. The tentative start date for projects is March 2025. These dates are indicative and subject to change as required by either AMED or NHMRC.

8. Responsibilities of awarded researchers

After the proposal has been approved, research leaders and their affiliated institutions will observe the following when carrying out the collaborative research and utilising funds provided by AMED and NHMRC.





8.1 Annual Progress Report

The respective research leader should promptly submit a progress report within two (2) months after the end of the fiscal year (for AMED-funded projects). For further details, please refer to the AMED Call Supplemental Guidance for Japanese researchers which can be found on the <u>AMED</u> website.

All NHMRC reporting requirements are outlined in Section 12 of the <u>NHMRC-AMED 2024 ASPIRE</u> Grant Guidelines.

8.2 Final Report

AMED funded researchers should submit the final report to AMED after completion of the period of international collaborative research. The report includes a general summary (the report format will be notified until the completion of the project) compiled jointly by both the Japan and the Australia research groups.

All NHMRC reporting requirements are outlined in Section 12 of the <u>NHMRC-AMED 2024 ASPIRE</u> Grant Guidelines.

8.3 Participation in a future AMED-NHMRC Joint Workshop/Seminar/Symposium

Research leaders will be encouraged to jointly present their work at the AMED-NHMRC Joint Workshop/Seminar/Symposium if applicable. Respective leaders will be notified by AMED and NHMRC when the joint event takes place. A joint event may be held either in Japan, Australia, or online.

9. Additional Information and Requirements for Researchers

Please follow the Call Supplemental Guidance (日本側研究者向け補足応募注意事項) for applicants based in Japan which can be found on the <u>AMED website</u>.

Applicants based in Japan should submit the document listed here.

- Common Application form
- ·Supplemental Application form for Japan-based applicants(日本側追加応募様式)

For Australia based applicants please refer to the <u>NHMRC-AMED 2024 ASPIRE Grant Guidelines</u> on GrantConnect.





10.Contact Information

Japan-based co-applicants should contact the following for further information:
Dr Sayaka Ohashi
Division of Research Program
Department of International Strategy
The Japan Agency for Medical Research and Development (AMED)
Tol: 181 (0)3 6870 2316

Tel: +81 (0)3 6870 2216 amed-aspire(AT)amed.go.jp

Australia-based co-applicants requiring further assistance are to direct enquiries to their Administering Institution's Research Administration Officer. Research Administration Officers can contact NHMRC's Research Help Centre for further advice:

Phone: 1800 500 983 (+61 2 6217 9451 for international callers)

Email: help@nhmrc.gov.au

NHMRC will not respond to any enquiries submitted after 13:00 ACT local time on 22 June 2022.