MINISTRY OF EDUCATION

ACADEMIC RESEARCH FUND TIER 1

Application Guidelines and
Terms & Conditions for
Principal Investigators and Administrators

Last updated in July 2019

Academic Research Fund Tier 1

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1. Introduction

1.1   The Ministry of Education (MOE) Academic Research Fund (AcRF) Tier 1 supports research in NTU that:

   (a)   Strengthen NTU's capability to perform high-quality research and compete for external research grants

   (b)   Groom young talent

   (c)   Support breadth of research

   (d)   Seed new research direction

1.2   AcRF Tier 1 funds research projects on a competitive basis. It is applicable for research proposals of total project values (TPV) **between $5000 and $200,000**, over a **3-year duration**.

   (a)   For Pure Mathematics and Statistics projects under the Informatics and Mathematics discipline cluster, the TPV proposed must be **$100,000 and below**.

   (b)   For projects under the Accountancy, Business, Humanities and Social Sciences discipline cluster, the TPV proposed must be $**100,000 and below**.

   (c)   This is a general call, with no specific theme. All areas of academic research are welcomed.

2. Application and Approval of Project Grant

Eligibility

2.1   Principle Investigator (PI) and Co-Principal Investigator (Co-PI) must be full time faculty members, who hold primary full-time appointment (defined as a minimum of 9 months a year) at NTU. Each PI is only allowed to submit one application.

2.2   The following staffs are not eligible to apply:
   - Visiting Professors
   - Adjunct Professors
   - Research Staffs

2.3   Please note the following PI's eligibility criteria for AcRF Tier 1 grant:

   a.   Due to strict budget limitations of Tier 1 funding, please note that applicants are strongly discouraged to hold consecutive Tier 1 awards. Hence, applicants who were awarded a Tier 1 award in previous grant call are not eligible to apply for the immediate next grant call.

   b.   As the number of follow-on competitive grants is an important criterion that being monitored by MOE, applicants who were awarded Tier 1 award(s) in previous grant calls but have yet to secure follow-on external grants from other sources will not be eligible to apply for another Tier 1 grant. The applicant must fill up **Section 1** of the application form and provide details for the follow-on non-Tier 1 project(s) which was resulted from his/her previous Tier 1 award(s).

   c.   Applicants with overdue Tier 1 reports (before the grant call closing date) are not eligible to apply. The period of ineligibility will continue until the overdue reports are submitted.

Application Procedure

2.4   The grant call for AcRF Tier 1 proposals will be held twice a year. The grant call and closing dates will be communicated to applicants by Research Support Office (RSO).

2.5   All proposals must be submitted online through Nanyang Online Research Administration system (NORA).

2.6   Prior to submission, all proposals have to be verified by school research offices and endorsed by head of Division (if applicable) and Chair/Associate Chair (Research).

2.7   Applicants are encouraged to refer closely to **Annex A: AcRF tier 1 Fundable/Non-Fundable Item Guidelines** when preparing the budget requested.

For Resubmission of Proposals

2.8   If an applicant would like to resubmit a previously rejected MOE AcRF Tier 1 (or Tier 2) proposal or a proposal of similar scope in the next grant call for reconsideration, the applicant must address the comments and concerns raised by NTURC panel. The applicant must fill up **Section 2(a)** of the application form and provide a point-by-point rebuttal to address every one of the EP's earlier comments/concerns.

2.9   If an applicant has submitted a similar proposal to other grant calls (such as NMRC, SSRTG, A*STAR, SMF etc.), the applicant must fill up **Section 2(b)** of the application form. The applicant must justify how the current proposal differs significantly from the previous submission.

2.10   A resubmission without the above clarification will not be considered for support. Proposal cannot be resubmitted more than once. Otherwise, it could be rejected without review.

2.11   A proposal that is resubmitted will compete on an equal basis with other proposals submitted in the same grant call.

Evaluation and Approval of Project Grant and Ethics Approval

2.12   The NTU Research Council (NTURC) and its sub-committees oversees the evaluation and approval of research proposals.

2.13   Each project will be evaluated by NTURC and its sub-committee according to the following main criteria:
   - Novelty of research idea
   - Significance of research
   - Approach (includes methodology, using of state-of-the-art)
   - Resources
   - Investigator and team members
   - Inter-disciplinary Research

2.14   Where applicable, the PI has to obtain full ethics approval and any other research-related approvals (such as risk assessments) from the relevant authorities before the AcRF Tier 1

research grant account is activated. Research Support Office (RSO) and Schools should ascertain that the necessary approvals are in place before grant disbursement.

2.15   The PI has the responsibility to conduct his research in compliance with NTU's code of ethics, research integrity and responsible research conduct. In the event that the ethics and other research-related approvals are withdrawn or suspended, affected PIs must inform school research office and RSO immediately. Continuation of funding will be contingent on the reinstatement of the relevant compliance approvals.

3.   Regulation on Use of Awarded Grant

3.1   Use of funds is subjected to AcRF Tier 1 Terms & Conditions and NTU prevailing guidelines, policies and procedures.

3.2   The research funded under AcRF Tier 1 must be conducted in Singapore. No part of the grant should be:
   • Spent by any members of the project on research conducted overseas; and/or,
   • Sub-awarded, sub-contracted or transferred to overseas collaborators.

3.3   PIs must obtain approval from the relevant Approving Authority before incurring expenses on items not originally budgeted for or approved in the grant.

3.4   There shall be no purchase of equipment **three months** before the latest approved project end date.

3.5   There should not be any expenditure incurred (based on invoice date) outside the duration of the project. The only exceptions are: 1) for the payment of Performance Bonuses (PB) for work done within the approved project duration, as PB payment may occur more than 3 months after the date of project completion; 2) for payment of approved post-project conference expenses, the conference should be no longer than 3 months from the project end-date and included in the final report.

3.6   PIs are advised not to issue new purchase orders for consumables within the last three months of the projects if suppliers are unable to commit to a delivery date before the project end date.

3.7   Payments to vendors/suppliers or pending claims for approved expenses incurred during the project duration must be submitted to Office of Finance within 1 month of the project end date. The project account will be closed within 3 months of the project end date, after which, no further claims or payments can be posted to the defunct project account.

EOM

3.8   For manpower-related fund requisitions, update of all staff employed under the project must be provided, including those whose employment has ended.

3.9   The hiring supervisor (PI) shall employ or otherwise engage Research Assistants/ Research Technicians or staff of equivalent qualifications who are Singapore citizens and/or Singapore Permanent Residents to be deployed in the work under the Research.

   a.   For the purposes of this Clause 3.9, the term "Research Assistants" or "Research Technicians" or staff of equivalent qualifications shall mean research technicians, or staff of equivalent qualifications who participate in the Research by performing mainly technical tasks as well as providing support functions distinct from the work carried out by the Investigators.

b. Whilst Research Assistants/Research Technicians may provide intellectual input to the Research, they are not required to be directly involved in the management of the Research or for providing leadership in the conception and creation of new knowledge, products, processes, methods and systems under the Research.

c. At the point of entry, Research Assistants/Research Technicians will typically not be required to possess PhD qualifications. For clarification, "Research Assistants" will not include nurses and other hospital workers whom may assist in the Research.

3.10   In the event the hiring supervisor (PI) is unable to comply with Clause 3.9 above, the PI must seek prior approval from the approving authority with proper justification and Research Assistants/Research Technicians or staff of equivalent qualifications of other nationality can be employed only if the request is supported (refer to RG6 form).

3.11   For Research Fellows, the Institutions shall use reasonable efforts to employ or otherwise engage Singapore citizens or Singapore permanent residents unless the required expertise is not available or the skill of any foreign person is necessary for the performance of the Research.

4. Project-Level Performance Management

Annual and final Reports

4.1   PIs are to submit a copy of AcRF Tier 1 Progress/Final Report for each project via NORA. The following documents are to be uploaded:
- RG3 form (Annual Progress Report)/RG4 form (Final Report)
- Annex A- list of relevant publications (if applicable)
- Annex B- number of PhD, Master and Undergraduate students trained (if applicable)
- Annex C- technology disclosure (if applicable)
- Publications and abstract of conferences presentation
- SAP statement

4.2   PIs are to submit their annual progress report/final report to RSO within **three months** from the end of each reporting period/project completion date.

4.3   For projects with approved extension request, PIs are to submit:
a. One additional annual progress report if the total approved extension period is <u>more than 3 months</u>;
b. Two additional annual progress reports if the total approved extension period is <u>more than 15 months</u> (*Please note that extension is capped once and at 12 months, extension for a longer period will only be considered under exceptional circumstances*)

4.4   PIs who fail to submit the annual and final reports may be:
- Denied variation and/or extension until progress reports are submitted;
- Disqualified to apply for another Tier 1 grant (if the overdue report is not submitted before the grant call closing date)

MOE AcRF Tier 1 Programme-level Reporting

4.5   MOE has implemented a two-layer reporting structure: a) Annual Quantitative Reporting: and
      b) Triennial Qualitative Reporting.

Schedule of Tier 1 Triennial Reports

Year	Vintage for Assessment
2015	2009-2011
2018	2012-2014
2021	2015-2017

The triennial self-assessment reports serve to inform MOE of the quality of research in the University.

5.   Research Output and Publications

5.1   All publications shall acknowledge MOE's funding support by citing the Grant name "**Singapore Ministry of Education Academic Research Fund Tier 1**". It is the PI's responsibility to ensure that the protection of any IP is not compromised as a result of the publication of the research project.

6.   Grant Variation

6.1   PIs/school should submit all project change requests via NORA using the appropriate form:

No.	Type of Variation	Form
1.	Project Amendments (changes to project, extension of project end dates, termination/lapse of project)	RG1
2.	Grant Variation (changes to budget within/across categories)	RG2
3.	Closing of Research Project	RG5
4.	Nationality Waiver Request form • New Hire • Internal Transfer	RG6 Electronic form (submit directly at NORA)

6.2   PIs should refer to **Annex B: Tier 1 Guide for Processing Variation Requests** in their preparation of the variation requests to ensure that all supporting information/documents have been duly completed.

7.   Closure of Project Accounts

7.1   All projects are expected to be completed within 3 years from the start date of the project.

7.2   Schools must work closely with PIs to see to the finalisation of project statement of accounts and timely closure of research project accounts within 3 months from the project end date.

8. **Compliance of Administrative Guidelines**

8.1   In the event of non-compliance of this administrative guidelines, the University reserve the right to:
        (a)   withhold or withdraw the funding
        (b)   disqualify the PI from subsequent AcRF funding; and/or
        (c)   carry-out any action deem appropriate

Annex A: Guidelines for Fundable/Non-Fundable items

Type of Expenses	Description
EOM Related Expenses	
Salaries, CPF and fringe benefits including medical, dental, contribution to welfare fund, etc.	Allowable as part of overall compensation to employees provided such costs are incurred under formal established and consistently applied policies of the host university. The salaries offered to staffs should be reasonable, in line with local market benchmarks and comply with formal established pay scale of the host institution that is consistently applied regardless of the source of funds.
Bonus / Incentive payments	Allowable as part of a total compensation package, provided such payments are reasonable and are made according to a formal policy of the host university that is consistently applied regardless of the source of funds.
Annual leave	Allowable for full-time employees. The no. of days of leave accorded to staff must be in accordance with formal policies of the host university that is consistently applied regardless of the source of funds.
Staff recruitment and related cost	Allowable. Examples are costs associated with the on boarding of staff, staff insurance, overtime claims, employment benefits, employment levy, employment pass, pre-examination medical check-up and housing allowance.
PI's & co-investigators' EOM cost	Not allowable.
Student Assistants / Interns	Allowable, only full-time students enrolled in local institutes of higher learning qualify to be supported as a student assistant / intern. For students who are recipients of existing awards (or stipends), the hiring period should not be more than 6 months.

OOE Related Expenses	
Visiting Professors/Experts	Not allowable unless specifically provided for in the grant proposal and approved by approving authority. The Visiting Professor must be identified and his/her contribution to the project must be clearly defined and described in the proposal.
Bank charges	Allowable as long as it is specifically related to the payments for consumables and equipment used in the project.
Books and specialised journals relevant to the research	Books or lab manuals are allowable only if these are directly related to the project. Specialised journals are allowable only if these are directly related to the project and are not available in the university's libraries. The funding for journal subscription would be restricted to the duration of the project.
Customs and import duties	Allowable as long as it is specifically related to importation of consumables and equipment used in the project.
Entertainment & Refreshment	Not allowable.
Fines and penalties	Not allowable.
GST	Allowable for expenses incurred for the project.
Insurance premiums	Not allowable. The host university is responsible for the insurance of the equipment, relevant workmen compensation and professional indemnity insurance which are in line with the host university's risk policies.
Legal fees	Not allowable.
Local & Overseas conferences	Allowable, if conference is directly relevant to the research area or necessary to accomplish the project objectives for PI, co-investigators, co-applicants, researchers and research students working for the project. If the conferences are conducted overseas, the travel policy of the host university must be consistently adhered to. The PI must submit a copy of the abstract when claiming reimbursement for such expenses and append to their annual/ final report.
Overhead expenses - rental, utilities, telephone charges, facilities management, etc	Not allowable.
Patent application, IP related and commercialization expenses	Not allowable. This includes patent application filing, maintenance and other related cost. Such cost should be paid by the host institution.
Photocopying charges	Allowable.

Professional fees (including fees to consultants)	Not allowable, unless deemed necessary and pro-rated to the project, specifically justified and provided for in the grant application/variation request. The proposal/variation requests must show how the required professional service contribute to the research and why the work cannot be performed by the research team. To include credential of the service provider(s) and fee breakdown.
Software	Not allowable unless specifically provided for in the grant and approved by the approving authority.
Professional membership fees	Not allowable. This applies to PI and Co-Investigators as well as all other researchers working for the project.
Publications	Allowable. Page charges for publication of manuscript in professional journals are allowable. The costs of reprints and publishing in other media, such as books, monographs and pamphlets are **not** allowable.
Purchase of lab supplies, consumables, animals, use of services or lab spaces within the host institution's central facilities	Allowable. The cost for the use of the services and central facilities owned by the host institution such as animal holding units, central laboratory services are allowable and must be based on host institution's fee schedules which are consistently applied regardless of source of funds. Host institution may be requested to certify that the fee structure is applied consistently.
Lab safety training and related expenses	Allowable.
Repairs and maintenance of research equipment	Allowable, if specifically budgeted for the project and the equipment is used extensively for the benefit of the research project. The period of maintenance funded from the research grant should be restricted to the duration of the project. For new equipment, maintenance should not be budgeted for the duration the equipment is under warranty (e.g. Year 1) and quotations for maintenance contract must be included.
Staff retreat	Not allowable.
Stationery & printer consumables	Allowable.
Transportation, postage & courier services	Allowable. This includes postage, courier and freight charges for bringing in equipment and specialised research consumables and reimbursement for staff transportation.
Volunteers and research patients	Allowable for payment to volunteers and research subjects provided this is the scope of the research and has been provided for in the grant and approved.
Training	Not allowable, unless deemed necessary to the project, specifically justified and provided for in the grant application/submitted request.

Purchase of Equipment	
General policy	There shall be no purchase of equipment <u>3 months before the completion date of the project</u>. The completion date of the project refers to latest approved completion date.
IT equipment	Not allowable. Purchase of computer equipment, and printers are generally not allowed unless they are deemed essential to the project and have been approved by approving authority.
Purchase of PDAs, tablets, handphones, etc	Not allowable
Office equipment	Not allowable
Office furniture & fittings	Not allowable
Cost of capital works and general infrastructure (including the costs associated with the establishment and running of the Grant Administration Office)	Not allowable

Annex B: Tier 1 Guide for Processing Variation Requests

S/N	Type of Request	Key Considerations		Supporting Document Required	Types of checks by schools/RSO	Approving Authority
1.	**Fund Virement**					
General Considerations		The significance of the proposed items to the project outcome and the reason it was not budgeted in original proposal	Fund virement is to support the project only, not for support of "follow-on" research	RG2 form	RG2 form is duly completed and endorsed. All supporting documents attached. Check is done on whether requested item was in the approved budget and whether requested item is within Tier 1 fundable list	Request for new item within and across categories- Director of Research Fund virement within or across categories up to $10,000 – ACR/HOD Fund virement within or across categories exceeding $10,000- Director of research
		Cost-savings principle	It is possible for PI to use cost-savings within approved project cost to purchase essential new items not previously budgeted. However, purchase must be based on needs; availability of savings is not a reason for new purchase	Latest statement of account	Fund availability.	
				Relevant and recent quotations	Reasonableness of quotes by cross-referencing similar purchase or independent checks. Whether proposed purchase items are already available in the school or NTU, or can be more cost-effectively leased	
		Stage of Project	Compelling justifications to be provided for virement requests if project is ending in a year or less. Virement would not be approved if project is ending in 3 months or less, unless in exceptional cases.		The PI has no outstanding annual/final reports.	
2.	**Amendments to Project (General)**					
		Stage of Project	There should not be any amendments 3 months from end of project.	RG1 form Latest statement of account	RG1 form is duly completed and endorsed, all supporting documents are attached. Fund availability.	All amendments must be approved by stipulated approving authority.
		The need for amendments	Amendments should support the original objectives of the project only, not for support of 'follow-on' research.		PI has no outstanding annual/final reports for any MOE grants.	

S/N	Type of Request	Key Considerations		Supporting Document Required	Types of checks by schools/RSO	Approving Authority
Amendments to Project (Additional Requirement)						
2a.	Change of PI/Co-PI	Suitability of proposed PI/Co-PI School is encouraged to recommend replacements who have worked closely with PI, preferably on the project to be transferred.	Ability of new PI/Co-PI to capture the benefits and achieve the intend objectives of the project.	RG1 form Information on outgoing PI/Co-PI; last day of work in University, name of institutions he will be joining, etc. CV of proposed new PI/Co-PI/Job scope of replacement PI/Co-PI/Letter of recommendation	RG1 form is duly completed and endorsed. All supporting documents attached. Application should reach approving authority 3 months in advance before PI leaves (for contract expiry/termination cases) and as soon as practicable for resignation cases. Approving authority needs to determine whether the proposed PI is eligible based on Tier 1 eligibility criteria and whether he/she is suitable and has the skills to continue and complete the research work.	Director of Research
2b.	Change of collaborator (addition/removal)	N.A.	N.A.	RG1 form	School has to ensure timeliness in submitting requests to DOR for changes in collaborator, such as removal or addition of collaborators.	
2c.	Project extension	Impact on deliverables and usefulness of final research outcome in view of the delay	To ensure currency of research, extension is capped once and at 12 months unless there are very compelling reasons to extend for a longer period.	Evidence of satisfactory progress (e.g. copies of publication arising from the research, abstracts of conferences attended etc.)	RG1 form is duly completed and endorsed. All supporting documents attached. Approving authority to assess if it is realistic for the project to achieve closure with a short extension. Request must reach approving authority at least 3 months before project completion date.	
		Cost implications	Must be within approved budget (i.e. no additional budget)			
2d.	Engagement of non-Singaporean/Permanent Resident Research Assistants/ Research Technicians	All project hires must comply with the Ministry of Manpower's Fair Consideration Framework.		RG6 form (for New Hire) Screenshot of JobsBank/MySkillsFuture posting. CV of proposed candidate. Electronic form at NORA (for internal transfer) Please fill up all the required information.	School should work closely with the HR. The HR should file a copy of the approved RG6 forms.	

| 2e. | Termination/lapse of Project | Alternative options to termination | Other options should be explored to ensure that the best outcome is achieved with the investment already made. | Winding-down Plan: Department and PI should jointly develop a winding-down plan, including:
• Propose a winding-down budget
• Ensure results are published/disseminated
• Students are transited to other projects or otherwise not disrupted due to the termination. | RG1 form is duly completed and endorsed. All supporting documents attached.

Schools to assess adequacy of the winding-down plan. | |

S/N	Type of Request	Key Considerations		Supporting Document Required	Types of checks by schools/RSO	Approving Authority
Amendments to Project (Additional Requirement)						
		Orderly conclusion of project	Project accounts should be frozen immediately once termination proceeding is initiated.	• Equipment, material/consumables purchased are properly accounted for and transferred to other department. The report should be signed off by dean of department and director of research.		
3.	**Closing of Research Project**					
	Closure of research project account	Automatic closure	Original PI has become unavailable (e.g. passing, resignation) HOD should propose a replacement PI. If the replacement PI is not accepted by Approving authority, the project is automatically terminated	RG5 form together with a cover letter and statement of account.	RG5 form is duly completed and endorsed, all supporting documents are attached.	Director of research