

Ministry of Education

ACADEMIC RESEARCH FUND TIER 2

Administrative Guidelines
for Universities and Principal Investigators

(Version 22 January 2019)

1. Introduction

1.1. The Ministry of Education (MOE) Academic Research Fund (AcRF) Tier 2 supports research in Singapore-based Autonomous Universities (AUs)¹ so as to fulfil the following objectives:

- (a) Advance high-quality research of international excellence that challenges current understanding or provides pathways to new frontiers;
- (b) Support academic research as a foundation for discoveries that hold promise for impact on the economy and society; and
- (c) Support post-graduate research training in our universities.

1.2. AcRF Tier 2 funds research projects on a competitive basis across Singapore-based AUs. Each grant² proposal submitted should have a total project value (TPV) of **between \$500,000 and \$1 million** over a **three - year duration**, except:

- (a) Pure Mathematics and Statistics projects under the Informatics and Mathematics discipline cluster with TPV of **\$250,000 and above** are also eligible for funding under AcRF Tier 2;
- (b) Projects under the Accountancy, Business, Humanities and Social Sciences discipline cluster with TPV of **\$100,000 and above** are also eligible for funding under AcRF Tier 2; and
- (c) For the remaining grant calls under the Research, Innovation and Enterprise 2020 plan, viz. the February 2019, August 2019 and February 2020 calls, projects under the Biomedical Engineering and Life Sciences discipline cluster can have TPV of between **\$500,000 and \$1.2 million over three to five years in duration**³.

¹ The AUs are: Nanyang Technological University, National University of Singapore, Singapore Institute of Technology, Singapore Management University, Singapore University of Social Sciences and Singapore University of Technology & Design.

² "Grant" means the fund disbursed under the MOE Academic Research Fund Tier 2.

³ MOE is piloting an increase in funding duration and funding cap for the Biomedical Engineering & Life Sciences (EP3) discipline cluster. This is to address feedback that projects in the biomedical sciences may need a longer time for results. Higher budgets/longer

2. Application and Approval of Project Grant

Application

- 2.1. Principal Investigators (PI) and Co-investigators⁴ (co-PI) must be full-time faculty of the AUs in order to be eligible for AcRF Tier 2 funding.
- 2.2. Full-time faculty members are those who hold appointment and perform duties at the university for a minimum of 9 months a year⁵.
- 2.3. AcRF Tier 2 funding can only be spent on research conducted by our AUs. Unless expressly allowed by MOE, the funds or any part thereof shall not be channelled to fund research and development activities overseas. Expenditure on overseas fieldwork must be specifically provided for in the research proposal and approved as part of the grant.
- 2.4. The grant call for AcRF Tier 2 proposals will be held twice a year in February and August, unless otherwise communicated by MOE. Applicants are required to submit their grant proposals using MOE's prescribed format via MOE's online grants portal. The grant call and closing dates will be communicated to the applicants by the AUs' Offices of Research (OREs).
- 2.5. Similar versions or part(s) of the current AcRF Tier 2 proposal should not be submitted to other agencies for funding.
- 2.6. PIs must declare if they have submitted similar Tier 2 proposals before, and highlight any substantial changes⁶. If they do not do so, their proposals may not be viewed favourably.
- 2.7. Prior to submission, all proposals have to be verified by the OREs and endorsed by the Director of Research (DOR). PIs should not communicate with MOE directly. OREs shall inform the PIs of the terms set out in this guideline and ensure compliance by the applicants.

funding duration should be proposed only for projects that really need it.

⁴ "Co-investigator" means the person or persons named in the Project Grant Approval as a Co-Investigator.

⁵ Faculty on visiting appointments are not eligible to be PIs or co-PIs. Research staff, such as Senior Research Fellows and Research Associates, are not considered to be faculty.

⁶ Examples of substantial changes could include: (i) using a similar methodological approach for a substantially different question, and (ii) using a very different methodological approach to address a similar issue.

- 2.8. The start date of the AcRF Tier 2 project is the date on which the account for the project is activated. The activation of the account should be within 6 months of the Letter of Conveyance⁷ to the university, otherwise the project approval would be considered as lapsed.
- 2.9. All approved projects are expected to be completed within 3 years from the start date of the project.
- 2.10. MOE will support the indirect research cost (IRC) at a flat rate of 20%⁸ of the total qualifying direct costs⁹ of each approved AcRF Tier 2 project.
- 2.11. Please refer to the general “Guidelines on the Management of Competitive R&D Grants” in Enclosure 1, which apply to the management of Tier 2 grants.
- 2.12. Approved Tier 2 grants will be subject to the general “Terms and Conditions of a Competitive Grant” stipulated in Enclosure 2.
- 2.13. For Tier 2 Research Scholarships only, AUs and PIs are allowed to draw on the funding for up to 4 years from the project start date, if the Tier 2 scholars are not engaged in any other projects¹⁰.
- 2.14. AcRF Tier 2 grant, including IRC funding, is provided on a reimbursement basis. AUs should therefore pay for the expenditure incurred for approved projects first, and subsequently claim for reimbursement from MOE.
- 2.15. Except for articles or papers published in scientific, technical or professional journals, the following disclaimer must also be included in all publications arising from the funded research: “Any opinions, findings, and conclusions or recommendations

⁷ The letter of conveyance refers to the letter that MOE sends to the AUs’ President after each grant call, conveying the specific budget approved for funding for each project.

⁸ The rate of IRC funding is subject to revision at MOE’s discretion. The total direct cost excludes Research Scholarships.

⁹ For projects awarded under the 2/2016 (Feb 2016) grant call and before, qualifying direct costs exclude exceptional items like (i) equipment costing more than S\$100,000; (ii) intellectual property, (iii) sub-contracted non-research work, (iv) payment to volunteers/research subjects, (v) infrastructure and (vi) research scholarships. For projects awarded under the 1/2017 (Aug 2016) grant call onwards, the only exceptional item is research scholarships.

¹⁰ While MOE encourages research scholars to gain as much exposure in research as possible, such students should not be concurrently engaged as paid project staff (e.g. research assistant) on AcRF grants.

expressed in this material are those of the author(s) and do not necessarily reflect the views of the Singapore Ministry of Education.”

- 2.16. AUs are required to **ensure that there are adequate internal financial controls and processes as well as adequate cost control measures to ensure that resources are utilised prudently and cost inefficiencies are minimised.**

Unsuccessful Applications and Re-submissions

- 2.17. Appeals for unsuccessful applications will not be considered.
- 2.18. Proposals which have been rejected for AcRF Tier 2 funding will not be considered in the following grant calls and ORE should ensure that PIs do not re-submit the same proposal¹¹ for consideration.
- 2.19. Applicants whose proposals are allowed for re-submission may do so, but have to provide a point-by-point response to the Expert Panel’s comments and address any concerns raised. All re-submissions will be counted within the overall quota set for each AU by MOE.

3. Training & Education Programmes

- 3.1. Wherever necessary, MOE may request PIs and/or the research team to participate in education-related programmes, such as:
- (a) Presenting their research work in MOE schools and institutions of higher learning;
 - (b) Organising teacher enrichment programmes; or
 - (c) Supporting MOE’s initiatives in creating a research culture in schools and institutions of higher learning.

4. Grant Variation

- 4.1. PIs should submit all grant variation requests through the AUs’ OREs, using the appropriate forms:

¹¹ Proposals will be regarded as the same if there are no substantial changes. Examples of changes that are not substantial include: (i) Rewording large parts of the application while retaining the scientific goals, objectives and/or approach, (ii) Adding/removing co-PIs and collaborators, (iii) Including new preliminary data, and (iv) Deleting part of the approach, such that the subsequent application is a subset of the earlier application.

No.	Type of Variation	Form
1	Amendments to Projects	RGF1
2	Fund Virement	RGF2
3	Engagement of Non-Singaporean Research Assistants/ Technicians ¹²	RGF3

- 4.2. PIs should refer to “Guidance for Processing Variation Requests” (Annex A) in their preparation of the variation requests to ensure that all supporting documents have been duly completed.
- 4.3. OREs should evaluate the PIs’ requests and make decisions on all requests that fall within the AUs’ approving authority. For requests that require MOE’s approval, OREs should first evaluate the requests based on the considerations, norms and checks listed in Annex A and make recommendations for MOE’s consideration.
- 4.4. For all variation requests, MOE’s decision is final and appeals will not be considered. **Retrospective variation requests are not allowed.**

5. Compliance of Administrative Guidelines

- 5.1. In the event of non-compliance of the administrative guidelines, MOE reserves the right to:
- (a) withhold or withdraw the funding;
 - (b) disqualify the PI from subsequent AcRF competitive funding; and/or
 - (c) carry out any action as MOE deems appropriate.

6. Miscellaneous

- 6.1. MOE reserves the right to change, including without limitation, modify, delete or replace the information and materials set out in this document unilaterally. MOE shall notify the AUs in writing, enclosing the revised terms and conditions, accordingly.

¹² Please refer to Enclosure 1 “Guidelines for the Management of Competitive R&D Grants”, paragraph 8, for the definition of Research Assistants/ Research Technicians.

- 6.2. As and when directed by MOE, AUs will allow an auditor appointed by MOE to carry out an audit of its financial and related processes/procedures pertaining to the utilisation of AcRF grants.

**Guidance for Processing Variation Requests
(Effective from 22 January 2019)**

S/N	Type of Request	Key considerations	Norms	Supporting Document required	Types of checks by ORE
1.	Virements	The critical role of the proposed items to 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 ¹³ .	RGF2	RGF2 is duly completed and endorsed. All supporting document attached. Check is done on whether requested item is in the approved budget and whether requested item is within Tier 2 fundable list.
		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 Relevant quotations	Fund availability Reasonableness of quotes by cross-referencing similar purchase or independent checks Whether proposed purchase items are already available in AU, 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.		The PI has no outstanding annual/final reports for any MOE grants. (PIs with over-due reports are not allowed to submit variation requests.)
1 a)	Additional Expenditure on Manpower (EOM)	If new headcount is requested, PI has to explain the staff's job scope		Job scope of additional EOM	ORE needs to assess the reasonableness of request, e.g. the job scope is not too small for the headcount. If the need is short-term, ORE needs to assess if part-time manpower is more appropriate
1 b)	Visiting Professor /Visitors ¹⁴	Relevance and contribution to project outcome	The need for VP/visitors must be driven by project need (e.g. not because AU requires VP to give public lecture or other non-project activities.)	Curriculum Vitae/bio of prospective candidate	ORE needs to assess the role and expertise of the visitor.
		Track record		Job scope/deliverables of VP	ORE needs to assess reasonableness of request, e.g. the job scope is commensurate with the duration requested. Particularly, ORE needs to assess if the work can be done via email/tele-video conferencing.
		Duration of stay	The job scope and deliverables of VP must be clear for assessment of the duration required of his/her service		For requests that exceed the approved Visiting Professor/Visitor's budget and/or where the visitor has not been identified and approved by MOE , MOE's approval will have to be sought.
	Salary	Pay for VP must be reasonable and aligned with university's norms			
1 c)	Purchase of New Equipment/OOE Items	Cost and useful life of equipment	Depreciation of equipment costing >\$20k and which has useful life >5 years can be charged to the project for the project duration if the purchase is made within 1 year from the project's completion date.	For equipment costing >\$20k: • Letter of approval from University Facility Committee.	University Facility Committee should assess the likely utilisation and ensure that there is no duplication.
		Depreciation of equipment of significant value should be charged to the project for the project duration only. This encourages prudent purchase and fair sharing of costs by those who will stand to benefit from the equipment even after the project has ended.		For equipment costing >\$20k and whose useful life is >5 years: • Letter of commitment to co-fund equipment	For equipment costing >\$20k and which has useful life >5 years, letter of commitment to co-fund equipment must be furnished from co-funders, who can be department, university or other agencies.
2 a)	Departure ¹⁵ of PI/Co-PI; Change of PI/Co-PI	Suitability of proposed PI/Co-PI	Ability of the new PI/Co-PI to capture the benefits and achieve the	Information on outgoing PI/Co-PI: last day of work in University, name	Application should reach MOE 3 months' in advance before PI/Co-PI leaves (for contract expiry/termination cases) and as soon as practicable for resignation cases. ORE should consider

¹³ An exception is for PIs whose requests for 6-month extensions to explore additional scope are approved.

¹⁴ Visitors includes staff who have short-term appointments with the AU and concurrently retain full-time positions overseas. This is regardless of the job title such staff may have (e.g. Research Fellow/Visiting Research Fellow) at the AU. Also includes speakers and participants of conferences/events organised as part of the programme.

¹⁵ This includes resignations, retirement, extended no-pay leave, extended sabbatical leave as well as other instances where the PI/Co-PI may be considered to no longer meet the eligibility criteria.

S/N	Type of Request	Key considerations	Norms	Supporting Document required	Types of checks by ORE
			intended objectives of the project	of institutions he will be joining, etc	working closely with HR and schools to ensure timeliness especially in submitting change of PI requests.
		Cost implications	Must be within approved EOM.	CV of proposed new PI/Co-PI/ Job scope of replacement PI/Co-PI/Letter of recommendation	ORE needs to determine whether the proposed PI /Co-PI is eligible based on Tier 2 eligibility criteria and whether he/she is suitable and has the skills to continue and complete the research work If in doubt, request for Letter of recommendation from current employer of proposed PI/Co-PI.
		<p>Applicable to Departure of PI: MOE reserves the right to terminate the grant if:</p> <ul style="list-style-type: none"> • No suitable replacement is found; • Proposed PI is rejected; or New PI cannot achieve the necessary outcomes. 		<p>Applicable to Departure of PI: Mitigation Plan: Department and new PI should jointly develop a mitigation plan to sustain/resuscitate the project, including:</p> <ul style="list-style-type: none"> • setting new milestones/KPIs • taking steps to ensure students' graduation is not disrupted • committing to put in all necessary resources and time <p>The plan should be signed off by both the dean of department and the new PI.</p> <p>Should the PI plan to be away for more than 3 contiguous months in a year and cease active involvement in the project, the PI should submit a mitigation plan to MOE at least 3 months in advance, to explain how the project will be kept on track. The AU may also wish to propose a covering PI.</p>	ORE needs to assess the feasibility of the mitigation plan
2 b)	Project Extension	Impact on deliverables and usefulness of final research outcome in view of the delay	To ensure currency of research, extension will be capped at 6 months	Evidence of satisfactory progress (e.g. copies of publication arising from the research, abstracts of conferences attended etc)	For extension requests that are motivated by project delays, a cap of 3 months will be applied.
		Cost implications	Must be within approved budget.	Revised Project Implementation Schedule (Gantt Chart)	MOE may consider a no-cost extension of 6 months only if the PI is able to demonstrate excellent scientific progress. Such PIs can use this extension to explore follow-on research that is beyond the original scope of the project. As a general rule of thumb, the PI should have met the key project deliverables (i.e. publications and conferences) before submitting such requests. PI must submit a 1-page write-up on the additional research to be done during the extension.
2 c)	Engagement of non-Singaporean/Permanent Resident Research Assistants/ Research Technicians	All project hires must comply with the Ministry of Manpower's Fair Consideration Framework.		Screenshot of JobsBank posting. CV of proposed candidate.	ORE should work closely with the AU's HR. The AU's HR should file a copy of the approved RGF3 forms. The AU should work closely with PIs to vet the advertisements in JobsBank, such that job scopes and job requirements are clearly and adequately set out.
2 d)	Change of scope	Change of scope to pursue different research objectives is not allowed; this should be submitted as a new proposal.		N.A.	N.A.
2 e)	Change of Autonomous University by the PI	Impact on the project		Variation request endorsed by DORs of both the original and new AU. Transition plan, showing how the	ORE needs to assess the feasibility of the transition plan

S/N	Type of Request	Key considerations	Norms	Supporting Document required	Types of checks by ORE
				transfer will take place with minimal disruption.	
2 f)	Termination	Alternative options to termination	Other options should be explored to ensure that the best outcome is achieved with the investment already made.	Department report: Department should prepare a report that includes: <ul style="list-style-type: none"> • A review of what went wrong for the project • What are the alternatives to terminations and why they are not applicable in this case • Preventive measures to avoid future occurrence. <p>The report should be signed off by both the dean of department and the director of research.</p>	ORE to assess the adequacy of the report and winding-down budget/plan.
		Orderly conclusion of project	A winding-down budget should be drawn up for MOE's consideration. This covers expenses necessary to effect an orderly conclusion, for a period not exceeding 3 months from the date of termination.		