Australasian Leadership Computing Grants
COVID-19 Special Call

Information for Applicants 2020

27 March 2020	Application call open
8 April 2020	Application deadline (5pm AEDT)
16 April 2020	Allocation Committee meeting
17 April 2020	Allocations announced

Contents

Background

The COVID-19 Accelerated Access Initiative is a joint initiative of the NCRIS-supported Australian high-performance research computing capabilities, comprising NCI Australia and the Pawsey Supercomputing Centre.

As part of that initiative, the Australian Leadership Computing Grants (ALCG) COVID-19 Special Call is intended to identify and provide leadership-class computing resources to impactful research projects directly relevant to the COVID-19 pandemic.

ALCG COVID-19 Special Call allocations will be tailored to meet the needs of successful projects and may include high performance computing (HPC), cloud, and storage resources and associated technical support at NCI Australia.

This call is open to all eligible prospective applicants.

Important dates

27 March 2020	Application call open
8 April 2020	Application deadline (5pm AEDT)*
16 April 2020	Allocation Committee meeting
17 April 2020	Allocations announced

If resources are still available, late applications may be considered. You must notify us via help@nci.org.au by 8 April 2020 that you're intending to submit an application.

HPC capability

NCI Australia is contributing its latest generation high performance infrastructure and world class expertise to support Australian researchers working on impactful research with reference to the COVID-19 pandemic.

ALCG COVID-19 Special Call HPC resources will be provided on NCI's new petaflop-scale supercomputer – Gadi. This system comprises approximately 3000 Intel Xeon Cascade Lake compute nodes, with 24 x 2 cores/node, configured with 192 GB RAM per node. Gadi also provides 50 Cascade Lake nodes with 1.5TB of memory, utilising Intel Optane DC Persistent memory, and 640 NVIDIA V100 GPUs in 160 nodes. Gadi's data interconnect is the latest generation Mellanox HDR InfiniBand, capable of data transfers at 200 Gb/sec.

ALCG COVID-19 Special Call data storage and expert support services (e.g. code optimization, workflow debugging, VMware support, data management advice etc.) will be provided in a tailored arrangement by NCI as appropriate to the proposed project.

Application details

The application process for the ALCG COVID-19 Special Call will be streamlined and expedited to support rapid deployment of HPC resources in 2020 Q2-Q4.

Eligible Lead Chief Investigators are invited to submit an application (single PDF document) to NCI User Support: help@nci.org.au. The application format and content are summarised below.

Please note that application process for the ALCG COVID-19 Special Call is an expedited one-step process. No project preregistration is required, as it was for the general ALCG 2020 Call for Expressions of Interest.

All applicants will be notified of their outcomes by email as soon as possible following completion of assessment.

Application format and content

An application shall be a single PDF document. The application document shall be submitted by email (attachment) to help@nci.org.au. Include the text "ALCG2020 COVID-19" and the surname of the Lead CI in the subject line of the email.

An application for the ALCG COVID-19 Special Call will comprise two parts:

PART 1

NOTE: Part 1 shall be no more than five A4 pages in total.

Part 1 consists of:

1. Cover Page including:

    a) Title
    b) Project IDs of any existing, related NCI, Pawsey or ARDC projects relevant to the application.
    c) Name and contact information for the Lead Chief Investigator
    d) List of any other Chief Investigators and their affiliations
    e) Summary of resources requested: HPC, cloud, data storage, and any expert support required.

2. Project description and impact (not more than 3 pages)

    a) An executive summary of the project
    b) Project outline
    c) Justification of the significance, originality and innovative nature of the project,
    d) Articulation of anticipated scientific impact and demonstrable contributions to economy, society, environment directly relevant to the COVID-19 pandemic.

3. Technical record and references (not more than 1 page)

    a) Evidence of capability and readiness to implement the project on NCI systems
        i. including details of the code/data set/workflow/etc. to be used
    b) Detailed workflow and execution plan
        i. including evidence of readiness to commence use of resources immediately.

PART 2

NOTE: Part 2 should be no more than six A4 pages in total

Part 2 consists of a curriculum vitae (CV) of the Lead CI and CVs of up to two additional CIs, including:

1. A link to their Google Scholar profile and their ORCID ID

2. Evidence of peer-reviewed funding for the research project

3. Evidence that the approach is world-leading, such as publications in high-impact journals.

Getting help

Read all supporting documentation if you have questions. Contact help@nci.org.au if you require assistance with your application.

Acknowledging NCRIS and NCI

A condition of accepting an ALCG COVID-19 Special Call allocation is that the Project must acknowledge the NCI resources in all publications and presentations of the associated work. The following is a standard acknowledgement template:

This work was supported by the Australasian Leadership Computing Grants scheme with computational resources provided by NCI Australia, an NCRIS enabled capability supported by the Australian Government.

The Lead CI also must agree to providing input to assist NCI in communicating (e.g. via research highlights, case studies, articles, interviews, etc.) the importance of HPC/D to Australian research.

Eligibility criteria

In accordance with guidelines for access to Commonwealth-funded research infrastructure and relevant Australian legislation, Chief Investigators (CI) and Lead Chief Investigators (Lead CI) of projects must hold at least a 0.2 FTE research position at an Australian higher education institution, research institute or publicly-funded research agency, and be based in Australia. If an applicant (Lead CI) holds a fixed duration contract for at least 0.2 FTE for the calendar year 2020, they are eligible to apply.

Lead Chief Investigators and Chief Investigators on an application should provide evidence of any independent research funding, for example, grants from the ARC or NHMRC. Any grants referenced by a Lead CI or CI must include that CI as a named CI. Applications citing grants on which the applicants are not primary (named) grant recipients will be disqualified for non-compliance.

An individual may be named as a Chief Investigator or Lead Chief Investigator on only one ALCG COVID-19 Special Call application.

Assessment criteria and scoring

Applications will be scored on the following criteria.

Project
- Quality and innovation
- Significance of the research
- Potential for the research to contribute to the national and international response to the COVID-19 pandemic

Investigators
- Research record and performance relative to opportunity (publications, research funding, recognition and esteem metrics)

Feasibility
- Adequacy of the time commitment of investigators to undertake the research and utilise the resources successfully
- Capacity to realise the goals of the project within the resources requested
- Appropriate track record demonstrating a capacity to use the requested resources effectively (high-performance computing / data / cloud systems).
- Suitability of the resources sought to support the research, and an appropriate and efficient use of the system

Benefit and impact

- Ability of the project to generate impactful outcomes and produce innovative economic, environmental and social benefits to Australia and the international community with reference to the COVID-19 pandemic.

Application, assessment and allocation process

The Call for Applications allocation process comprises the following stages:

	Process	Responsible Party
1	Call for applications announced	Secretariat
2	Applications accepted	
3	Administrative assessment: eligibility and compliance	
4	Assessment of applications	Allocation Committee Supported by Secretariat and NCI technical staff
5	Allocation Committee meeting	Allocation Committee Supported by Secretariat and NCI technical staff
6	Notification of outcomes	Secretariat

The Secretariat will review all applications for compliance as soon as possible following the application deadline. Potential cases of non-compliance will be referred to the Committee Chair for a final decision. The Secretariat will notify the Lead CI of an application confirmed as non-compliant within seven (7) days of the submission deadline.

NCI will assess each application for suitability/fit for its systems in the technical assessment. NCI may contact an applicant for further information as part of the technical assessment. Technical assessments are provided as advice to the Allocation Committee, and do not constitute a full assessment of an application. The Committee may also recommend that an applicant consult NCI for further technical advice during merit assessment or after an allocation is awarded.

Assessment and allocation protocol

Assessment of applications will be based on a combination of technical and scientific merit (see the section above on selection criteria) based on material provided in the proposal. All applicants are expected to provide a justification of the resources requested and are expected to demonstrate the capacity to use the requested resources effectively. The Allocation Committee reserves the right to allocate all or part of the resources available, and all or part of any specific request.

Assessment and allocation decisions are made by the Allocation Committee only. NCI staff provide advice or supporting information to the Allocation Committee but are not otherwise involved in determining allocations.

Resources available – maximum allocations

Projects may apply for a combination of resources as required for a project including expert support services. Maximum allocations of resources per project are:

System	Maximum Allocation per project
NCI-Gadi	20 MSU, for use during remainder of 2020 and Q1-2 of 2021
Project data storage	Up to 0.5PB, for use during the duration of the project only

Applications may also propose additional resources that will be considered on a case by case basis, including:

- The use of NCI's cloud environment as appropriate to support the project, and

- The use of NCI's high-performance data repository storage to support highly used, nationally accessible datasets that may be critical to support this work and be of benefit for other researchers.

Appeal process

All decisions of the ALCG COVID-19 Special Call Allocation Committee are final. Appeals will be considered only against administrative or procedural issues and not against decisions of the Committee or against assessor ratings and comments.