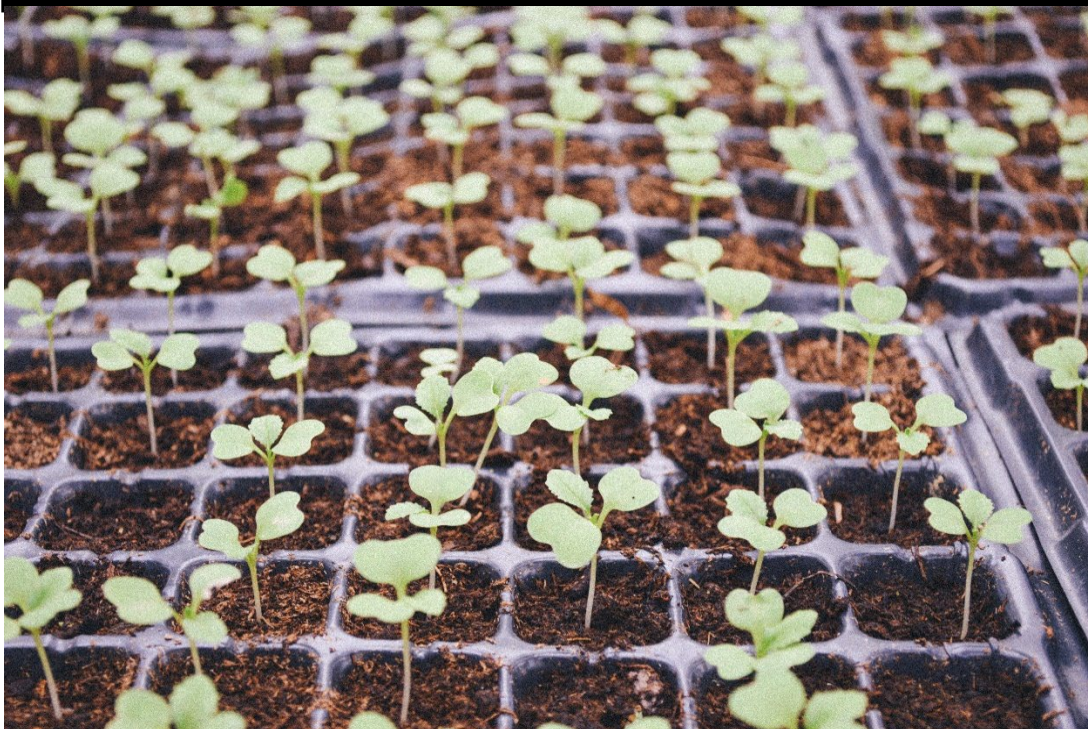




Sandpit to Seed (S2S) Fund Guideline for 2023-24



Summary:

Purpose:

To improve commercialisation opportunity and Technology Readiness Level (TRL) of solutions with agriculture and food supply chain applications. Supporting the sustainability of the region and the Australian farmers and producers in this industry.

Who can apply:

JCU researchers and students can apply for the S2S fund if the intellectual property is owned by JCU or assigned 100% to JCU and has not been disclosed.

The S2S Award:

Funding requests for up to **\$50,000** per application will be awarded through a competitive process to support Proof of Concept development, Prototyping or Minimum Viable Product (MVP) development activities that demonstrate a science's or technology's commercial potential and address identified market needs, according to Tropical North Queensland Drought Hub (TNQDH) priorities (Appendices). This fund does not cover patent costs. Coaching or mentoring may be provided to selected applicants for the project duration.

Important dates:

- Expression of Interest (EOI) submission due date: 17/July/2023
- Shortlisted announcement: 20/July/2023
- 5-minute pitch videos and full Application submission due date: 31/July/2023
- Committee's decision will be made by the end of Aug 2023
- Project commencement date: Early Sep 2023
- Project end date: End of June 2024

Program Overview

The Tropical North Queensland Drought Hub¹ (TNQ DH) is dedicated to increasing the uptake of innovation by producers to build a more sustainable and resilient TNQ region. With support from James Cook University (JCU), the TNQ DH is providing Sandpit to Seed (S2S) Funding to enable the development of intellectual property which benefits the region with the intent of progressing commercially viable research ideas to achieve the following outcomes:

- ✓ a “proof of concept” (POC) level or higher.
- ✓ to improve the Technology Readiness Level (TRL)
- ✓ to fast-tracking technology/innovation translation and outcomes.

The success indicator for each S2S investment will be a specific, targeted application to measurable commercial milestones.

Program Eligibility

Funding of up to \$50,000 per application will be considered for projects focusing on the agriculture and food supply chain. In some circumstances, additional funds may be requested subject to the viability of the applications and return on investment.

Through a competitive process, S2S will be awarded to Proof of Concept (PoC) development, Prototyping or Minimum Viable Product (MVP) development activities that demonstrate a science or technology's commercial potential and address identified market needs.

JCU keeps the right to commercialise the Intellectual Property (IP) on which the project is based. Any encumbered IPs or Background IP(s), Conflicts of Interest (Col), using commercial software, a third party or students' involvement shall be addressed and disclosed to JCU through the Expression of Interest and Full Application submissions.

Who can apply?

All S2S applications must have a Chief Investigator (CI) who is responsible for the project's delivery. To be eligible as a CI on an application, the principal applicant (i.e. the CI) must be an academic or research staff with an employment contract at James Cook University for at least the duration of the Project. However:

- Adjunct staff may be included as Associate Investigators.
- JCU Singapore staff cannot be included as Chief Investigators or the main applicant but may be included as Associate Investigators.
- Students should assign their IPs to JCU and work under the supervision of academic staff as the CI.

¹ <https://www.tnqdroughthub.com.au/>

Activities Eligible for Funding

Types of activities that S2S can support are those:

- ✓ addresses at least one of the priorities² of the TNQ Drought Hub (listed in the attachment);
- ✓ improves the intellectual property, which may significantly benefit TNQ DH, JCU the community.
- ✓ has a reasonable prospect of commercial potential and impact addressing demonstrable societal, community or industrial needs within the TNQ region.
- ✓ need proof-of-concept and/or prototype development before being presented to a potential investor, licensee, or other commercial/community partner.
- ✓ does not have access to other sources of funding for proving proof of concept and/or prototype development, or have potential access to other sources of funding for proving the concept subject to S2S funding; and
- ✓ can achieve proof-of-concept and/or prototype development and with an investment of no more than \$50,000 (although additional funding may be obtained from other sources to complement the project).

Program Management

JCU manages the S2S Program and supervises expenditure, progress, and outcomes of the Program.

The Committee

The TNQ Drought Hub Committee approves the investment of the S2S fund in selected projects.

Supervisor

Supervisor(s) are recruited internally or externally by JCU to supervise applications and projects. The role of a supervisor includes:

- ✓ Advice and guidance about S2S, potential industry partners and grants.
- ✓ Finalising approvals from JCU for agreed expenditure items
- ✓ Advice about commercialisation pathways and IP.
- ✓ Reporting against S2S progress and outcomes
- ✓ Managing declared conflicts of interest under JCU's guidance.

Successful Applicants

Successful applicants will be advised in writing and invited to accept the offer subject to the terms stated in the offer letter. Any additional requirements will also be communicated prior to the commencement of the project.

The first named CI is considered the project lead. The CI of a successful application is fully

² <https://www.tnqdroughthub.com.au/hub-priorities/>

responsible for the conduct of the project, reporting, and delivering the outcomes at milestones, health and safety of all personnel involved in the project.

Any changes to the approved budget cannot be undertaken unless prior approval from the Committee is sought. No over-expenditure on the project is allowed. If unforeseen costs require a budget review, these costs must be discussed with the committee in advance.

Unsuccessful Applicants

Unsuccessful applicants will receive a notification letter and feedback on their application. In case of the availability of more funds, some might be shortlisted to develop their application and will be invited to improve their application and resubmit. Feedback will be provided by the Committee in relation to applications if requested.

Selection Criteria

EOIs and Full Applications will be evaluated against the following criteria:

- How well has the project addressed the priorities of the TNQ Drought Hub or justifies how the project translates innovation research and knowledge to deliver productivity impacts for agriculture
- Probability of creating new or strengthening IP position through achieving a POC and/or Minimum Viable Product (MVP)/prototype.
- Quality of project team and Chief Investigator (the main applicant), including track record and project management skills.
- Quality of science and technical skills, including project feasibility, novelty, availability of resources (equipment, skills) and background research.
- Commercial potential, competitive advantage, clearly understood competitors, predicted market size, pathways to market, potential commercial partners identified, investment and/ or licensing potential, key risks to achieving successful POC.
- IP protected or protectable, investors/ contributors identified and committed.
- Immediate need for funding, i.e. project cannot be fully supported by existing or available grant schemes and is not an alternative to acquiring research funds.

Endorsement

Endorsement of the relevant Dean or Head of College/Institutes must be obtained before submission of EOI.

Application Process

Stage 1: Submitting an Expression of Interest (EOI) to the Supervisor:

The Applicant submits an EOI to the Supervisor via email. The EOI intends to provide a summary of the Project and for the Applicant to present their research innovation as a commercial proposal rather than an academic article.

Any issues that could seriously impede the Project (e.g. IP ownership, disclosure, etc.) should be addressed and disclosed at the EOI submission stage. This enables time for a solution to be found or managed accordingly. The Supervisor's feedback on the EOI is intended to be constructive and help strengthen a Full Application if the EOI proceeds. This Guideline form is part of the application form. Applications will be accepted until the deadline and MUST use the S2S application form. EOIs must be signed by all applicant(s) and the College Dean/Director (as applicable).

A completed and fully signed EOI, including its attachments, MUST be saved as one (1) PDF file and emailed to the Supervisor.

It is highly recommended to contact the Supervisor before submitting your application to obtain advice and assistance regarding the eligibility of projects, budgeting, and preparation of your application.

Stage 2: Submission of the Full Application to the Committee:

After reviewing and accepting the EOIs that generally meet the Criteria, the CIs will be requested to submit the Full Application to the Committee. The Full Application is a more substantive, commercially focused document and should consider all feedback received from the Committee.

The Full Application enables the applicant to begin planning the project management, defined milestones or stage-gate processes with clear objectives, activities, measurable outcomes, deliverables, and associated budget and timeline/Gantt Chart.

A **five-minute video pitch shall be recorded**, and its link will be shared with the Supervisor as a Pitch to the Committee to support and address the Full Application. This record should be easy to understand for an intellectual person, regardless of their profession or academic background, focus on the Project's commercial/impact/value(s) and set reasonable and achievable objectives and outcomes for this investment.

Award Management

Commencement

Successful applicants must commence the Project by the date agreed upon with their S2S supervisor. If the Project cannot commence on this date, the applicant must advise the supervisor and negotiate an agreed date. If required, IP shall be assigned to JCU before the project starts. Ethics approvals must be obtained (if required), and regulatory requirements must be in place before the Project's commencement. The duration of the process should be considered in the project schedule.

Payment of Milestone Instalments

S2S funds must be expended in strict accordance with the approved budget for the reasons outlined in the application. Suppose the applicants wish to vary the agreed funds'

expenditure; they shall notify the supervisor of the variation, who will seek approval from the Committee. This approval must be received before any commitment that might affect the Project or its outcomes.

Procurement will be the applicants' responsibility, and JCU procurement policies apply. Any equipment procured during the Project will remain the property of JCU.

Authorisation for the release of each milestone instalment is subject to the following:

- the satisfaction of the supervisor, the funding recipient, is achieving the milestone that has fallen due.
- the funding recipient is providing the supervisor with all progress reports and a project report as relevant.

Termination

S2S funding may be terminated by JCU/Committee for any of the following reasons:

- i. The project funding has been directed to unapproved expenditure.
- ii. The project needed to provide satisfactory reports on progress in a timely manner.
- iii. The project has not made satisfactory achievements as expected or planned.
- iv. That serious misconduct, including, but not limited to, ethical breach or provision of false or misleading information, has been committed by any Project team member.
- v. Disclosing confidential information or conflict of interests.
- vi. The applicant leaves JCU during the project period. Or critical personnel from the Project team leave the project (illness, injury, departure from JCU).

Repayment of Funds

On the Project End Date or earlier termination of the project, the applicant must:

- In exceptional circumstances where payments have been made in advance, any unacquitted funds must be returned to the S2S Fund upon completion of the relevant milestone.
- Suppose the contract is terminated before the end of the term. In that case, any unacquitted funds must be returned to the S2S Fund, less the amount of funds used to cover expenses committed before notice of termination.

Delay in Achievement of Milestones

The applicant must notify the Supervisor promptly in writing (email) if a milestone has yet to be achieved or is unlikely to be completed by the due date for that milestone. Such notice must set out:

- vii. the milestone(s) affected and the project overall.
- viii. the reason for the delay.
- ix. the action the Applicant proposes to take to achieve the Milestone.
- x. the anticipated date for achievement of the Milestone.
- xi. the anticipated effect the delay will have on the achievement of subsequent Milestones; and
- xii. the anticipated effect the delay will have on the undertaking and completion

of the Project and the overall budget for the Project.

Conflict of Interest (Col)

Any Conflict of Interest between this Program/Fund, the CIs, and the team shall be disclosed and managed in line with JCU's conflict of interest policy. The Supervisor must be notified of any actual, perceived or potential Col(s).

Intellectual Property (IP)

IP created under the S2S Fund will be owned and governed by James Cook University's Intellectual Property Policy and Procedure. Suitable IP pathways, strategies and agreements are to be negotiated with the Project Supervisor for final approval by JCU. S2S funds and this Project intend to exploit the Project's IP to ensure the Project leads to impactful outcomes and values, preferably for the region's benefit.

Risk Assessment

A risk assessment template should be completed. A risk assessment should identify potential hazards and determine the actions or controls required to eliminate or reduce any risks to the health of researchers, staff, and contractors.

Reporting

Successful Recipients are required to submit the following reports to the Supervisor:

Milestone Progress Report: The Successful Applicant shall submit a report to the Supervisor to review after each Project Milestone. Once the supervisor confirms the progress of the Project, allocated funding for the next Milestone will be released.

Completed Project Report: At the end of the project, a comprehensive project report shall be delivered to the Supervisor. Once the Supervisor confirms that the Project has been carried out as per the stated activities, outcomes are achieved, and all are reflected in the report, allocated funding for the performance will be released. JCU may use the non-confidential contents of the Project Report as the basis for case studies, marketing and news releases.

Supervisor

If you have any questions, please contact Dr Mohammad Farjoo at mohammad.farjoo@jcu.deu.au. In case of any changes in this role, the CIs will be noted.

Appendices

TNQ Drought Hub's Priorities:

Drought and climate change adaptation

- Identifying and addressing risks of increased evaporation, reduced rainfall, or greater rainfall variability to water storage
- Identifying and addressing risks of increased frequency of drought-related heatwaves to agricultural production
- Adding value to existing drought knowledge, platforms, tools, and RDEA&C
- Translating technical information for improved understanding, decision making and planning
- Supporting enterprise level adaptation to changing drought and climate risks
- Identifying drought management techniques in rangeland systems
- Supporting the adoption of improved agricultural production systems and business management practices to underpin resilience to drought
- Identifying irrigation systems and management in cropping land to optimise water use efficiency to underpin resilience to drought
- Identifying risks and impacts of drought and climate change on water quality and runoff
- Optimising the economic benefits from sustainable agricultural production systems
- Identifying and supporting opportunities for economic diversification
- Identifying and piloting innovative financial models
- Supporting regional drought resilience planning processes

Land and soil management

- Enhancing land condition for drought resilience, animal production and environmental market opportunities
- Enhancing pasture response for improved drought resilience
- Enhancing soil health in cropping, sugarcane and horticulture production systems for improved drought resilience

Innovation and technology

- Increasing commercial application of intellectual property, technology and technical services in drought resilience
- Establishing new agricultural businesses, ag-tech enterprises, and engaging innovative approaches for existing regional SMEs
- Facilitating an innovation and technology ecosystem that integrates industry problem statements, practical understanding of ag-tech solutions, and on-farm demonstration

- Supporting solutions to enhance digital connectivity and planning to enable the rapid uptake of new technological innovations
- Facilitating accelerated commercial innovation and technology solutions

Enhancing skills and human capacity

- Building human capacity to enhance enterprise, town and community, and regional resilience e.g. by enhancing leadership, volunteering and mental health knowledge and skills
- Facilitating collaborative and co-design pathways which combine traditional knowledge, local knowledge, experiential learning, and scientific understanding
- Upskilling multi-agency staff and primary producers to promote practice change
- Upskilling research, academic and extension professionals in co-design and engagement techniques to ensure meaningful and practical outcomes
- Building greater adaptive capacity in grazing land managers and communities to manage impacts of climate variability and change
- Improving the understanding of behavioural barriers to uptake and trigger points for engagement
- Supporting the translation of research into practice
- Creating partnerships between RDEA&C providers, policy decision makers, funding opportunities and communities

Enhancing Sustainable Aboriginal and Torres Strait Islander Resilience

- Supporting new and existing Aboriginal and Torres Strait Islander agricultural enterprises through access to water and land, and empowered by sustainable community business networks and governance
- Enhancing business, governance and organisational capacity and capability at enterprise, community and regional scales
- Supporting Aboriginal and Torres Strait Islander Peoples' knowledge and aspirations in sustainable agribusiness and Indigenous led supply chains
- Identifying, piloting and testing innovative financial models to develop Aboriginal and Torres Strait Islander Peoples community enterprises
- Supporting Aboriginal and Torres Strait Islander Peoples' aspirations to lead culturally appropriate regional development and RDEA&C activities
- Contributing to Aboriginal and Torres Strait Islander identified needs