APPLICATION KIT – 2019/20 RESEARCH PROJECT INVESTMENT

EXPRESSIONS OF INTEREST and PRELIMINARY RESEARCH PROPOSALS

Introduction

This application kit provides information to assist applicants in the preparation of Preliminary Research Proposals (PRPs) for Sugar Research Australia's 2019/20 investment.

SRA invests in and manages a portfolio of research, development and adoption (RD&A) projects that drive productivity, profitability and sustainability for the Australian sugarcane industry.

The SRA Strategic Plan 2017/18-2021/22 shapes sugar industry investment in Research, Development and Adoption (RD&A) activities and is available on the SRA website. The Strategic Plan was developed through extensive industry consultation and aligns with the National Sugarcane Industry Research, Development and Extension (RD&E) Strategy, the Commonwealth Government Science and Research Priorities and Rural RD&E Priorities, and the Queensland Government Strategic Objectives for investment in the sugarcane industry.

The Strategic Plan drives the industry forward through the four overarching goals of profitability, improved sustainability, enhanced capability and organisational excellence. Further, it outlines nine Key Focus Areas (KFA) for industry activities, with eight of these being focal points for research investment. Each KFA has clearly described outcomes and intended impacts and it is critical that research proposals describe alignment and contributions to their delivery.

Key Focus Area 1: Optimally-adapted varieties, plant breeding and release
Key Focus Area 2: Soil health, nutrient management and environmental sustainability
Key Focus Area 3: Pest, disease and weed management
Key Focus Area 4: Farming systems and harvesting
Key Focus Area 5: Milling efficiency and technology
Key Focus Area 6: Product diversification and value addition
Key Focus Area 7: Knowledge and technology transfer and adoption
Key Focus Area 8: Collaboration and capability development
Key Focus Area 9: Organisational effectiveness

For 2019/20 investment, SRA has assessed its current research portfolio and identified three specific areas of opportunity as outlined below.

1. Key Focus Area 1

Two specific R&D investments are sought within KFA1.

- Developing advanced technologies for measuring sugarcane fibre qualities; and
- Developing and validating High-Throughput Phenomics Platforms (HTTP) and technologies for improving the efficiency of sugarcane clonal selection in the breeding program.

Formal Expression of Interest (EOI) documents can be found on the SRA website, along with supporting material where available. Applicants addressing these two KFA1 opportunities should contact the SRA Research Funding Unit (RFU) for more information if necessary.

2. Key Focus Area 5

Research investments in milling research are sought that deliver on the KFA5 Outcomes referenced in the SRA Strategic Plan 2017/18 – 2021/22.

3. Transformational Research

SRA seeks to increase the quantum of RD&A investment across its research portfolio that is capable of providing an industry step-change. Expressions of interest are sought across any/all KFAs in the area of Transformational Research according to the following SRA definition:

> *"Innovative research, development and adoption that if successful would result in substantial step-change to industry practice, profitability or sustainability. New and emerging 'innovative' technology or research methods are anticipated."*

Applicants within the Transformational Research category above **MUST** submit a 3-page outline of project concepts to fundingunit@sugaresearch.com.au by **1 December 2018**. A stage-gate process will be run with only approved project concepts permitted to proceed to a formal application stage. An exacting interpretation will be applied to the determination of a Transformational Research opportunity, with the expectation that only a small number of submissions will proceed to a formal application.

All concepts submitted will be treated by SRA as strictly confidential. Project concepts must use the template provided on the SRA website and provide information under the following headings – title, research providers, industry issue to be addressed and the impact anticipated from this research project.

The research investment process

SRA's contestable investment process is designed to encourage researchers from a wide variety of research organisations to bring great research ideas to our industry. Applicants from outside of the sugar industry are strongly encouraged to submit applications – for such applicants, they should contact the RFU for information, industry linkages and context for their research ideas.

Applications for SRA investment must be submitted through the online application system SugarNet (https://grants.sugarresearch.com.au/OmniNet). If necessary, assistance can be sourced from the RFU or from the help system (https://omnihelp.f1solutions.com.au).

Unless specified elsewhere, PRP applications must be received by midnight (AEST) of **21 December 2018**. The system will not accept late applications.

Applicants must be aware that research applications received may be altered, combined and/or integrated into structured, larger programs of work designed to address industry issues. This process may occur during the assessment and/or the contracting phase for successful applications.

Outside of this process, SRA may provide investment for research applications to external research grant schemes where significant industry benefit can be delivered. For applications to be considered by SRA, they must be received in a PRP format within SugarNet. As examples, SRA has previously supported applications to schemes such as Advance Queensland, Rural R&D for Profit, ARC Linkage and the National Landcare Program. **Potential applications to external grant schemes must be discussed with the RFU at least one month in advance of the scheme deadline.** Applications are unlikely to be considered for investment if insufficient time is provided for scrutiny and assessment.

Research proposals will be evaluated in a two-stage process.

- PRPs provide a description of the project idea and the industry issue being addressed. Applications must define project outputs, potential benefits and likely adoption pathways. Shortlisted applicants will be asked to submit a Full Project Proposal (FRP).
- FRPs require additional project information, particularly in areas such as project design, feasibility, likely benefits, intellectual property and alignment with industry priorities. FRPs will be assessed and ranked for Board consideration.

Guidelines for Researchers

In order to maximise the likelihood of being shortlisted, PRPs must clearly outline an alignment to relevant research priorities. Applications must specify the industry need for the proposed research, reference previous and current research relevant to this need, provide a clear description of strong outputs and outcomes and describe plans for their subsequent adoption. Successful projects are expected to demonstrate a significant industry return on the project investment and contribute to triple bottom line benefits.

Research proposals will be ranked using an Attractiveness/Feasibility process which has been designed to assess potential benefits, likely adoption of project outcomes or innovations (Attractiveness) and the prospects of the project delivering them (Feasibility).

Attractiveness

Attractiveness is assessed using an Input-Output-Outcome-Impact framework. Project applicants should consider the following information when describing their project ideas.

Inputs are defined as resources, existing knowledge, people skills, funds, equipment and methods. Your application should consider:

- Is the project appropriately costed to provide an appropriate return on investment?
- Are participating organisations making appropriate financial and other contributions, especially time?
- Will the project enhance the skills and capabilities of the participants?

Outputs are defined as new knowledge, skills, processes, practices, products and technology. Issues to be considered could include:

- Is the project original, innovative and well-researched, and does it add value to past and current R&D?
- How will the proposed activities contribute to achieving the desired outputs?
- Will project outputs be immediately available from this project, or will they contribute to future R&D?
- Is the strategy for extending the outputs sufficient to achieve the stated outcomes?
- Does the project clearly describe how the project outputs will be communicated to the industry to achieve the desired outcomes? Does this require the SRA Adoption Team?

Outcomes are defined as the effects or change realised from successful delivery and adoption of outputs. Specific thought should be given to issues such as:

- What is the complexity and likelihood of adoption as a result of the project?
- What is the expected return on investment (by SRA and partners)?
- Is the project supported by other agencies (industry and/or government)?
- Does the project fit into a broader program of RD&A delivering towards shared objectives?

Impacts are defined as the benefits to the industry, environment and/or community as a result of realised research and development outcomes. Consideration should be given to:

- What is the target market, what is its size?
- What is the extent of the expected economic, environmental and social benefits? Are these benefits significant and well explained?
- What additional activities are required after the term of the project to enable these benefits to be delivered? Will a third party be needed to deliver benefits?

Feasibility

Feasibility is assessed by considering Research Risk and Research Quality and will be performed using peer assessment, industry advisory committees and the RFP.

Research Risk can be assessed by asking questions such as:

- What is the likelihood, with high quality research, of delivering the desired outcomes?
- Are the objectives clear and well-described?
- Are the proposed processes for communication or distribution of outputs to industry likely to ensure maximum adoption?

Similarly, Research Quality can be assessed by asking questions such as:

- Are the proposed activities consistent with achieving the desired outputs?
- Do the participating people and organisations (and/or the primary contact person) have the necessary skills, experience and/or leadership capacity to deliver the desired high quality outcomes?
- Have the project investigators performed well in the past?
- Is the research plan well-described, and consistent with the project objectives?

What makes a good Preliminary Research Proposal?

The following checklist may assist in developing a high quality PRP.

Is the proposal attractive?

- Does the project address a high priority industry issue?
- What positive impact will the research have on triple-bottom-line benefits or mitigating industry risks?
- Projects should be innovative, not 'more of the same'; clearly articulate how the work goes beyond or builds upon previous R&D efforts in the area
- There should be evidence of industry interest and/or support as well as a plausible scenario for path-to-market

Is the proposal clear?

- Use dot points where appropriate
- Use short sentences, and as few words as possible
- Write in plain English, avoiding unnecessary jargon and technical terms

What do you want to achieve?

- Clearly identify the issue you are addressing
- Conduct a literature review of your intended work area and concisely describe past activities. This will frame the industry importance of your proposal and demonstrate how the project builds upon or complements previous work rather than reinvents it.
- Identify outputs, outcomes and objectives, and explain them in terms aligned with sugar industry and national priorities (these may include economic, environmental, and/or social benefits)
- Use SMART objectives (Specific, Measurable, Achievable, Realistic, Time-related)
- Are the benefits realistic and quantified as much as possible?

What is the best way of delivering the desired outcomes?

- Identify how the project will be conducted, how you will measure success and how the results will be implemented
- Have you clearly defined the inputs you require to fulfil all project requirements?
- How will you communicate project outcomes to the industry?

What can I use research funds for?

- Research funds can be used for salaries, travel and operating expenses
- Salaries for all staff require justification. Salaries should only be requested for staff that are essential for the project. It is expected that time allocations for staff will be significant and generally be greater than 10% of a full time equivalent for each staff member included in the application unless it is to provide specialist or essential skills. Smaller staff inputs into projects should be provided as in-kind contributions.
- Capital purchases may be considered but must be essential in order to conduct project activities or they will not be approved.
- All travel requested must be essential in order to conduct project activities and deliver project outcomes. International travel will usually not be supported within a research project application. SRA runs a separate Sugar industry Travel and Learning Award (STLA) for travel activities that are not specifically related to individual projects.
- FRP budgets will not be approved above the level proposed in the original PRP without significant justification, or as directed by the RFP.

Income received through this SRA research investment scheme can be classified as Category 1 – Australian Competitive Grant Income for 2019 Higher Education Research Data Collection. Further information can be obtained from the Commonwealth Government Department of Education and Training website - https://www.education.gov.au/self-assessed-australian-competitive-grant-income.

Timeline for KFA1 and KFA5 research investment process (dates may be subject to change)

Activity	Key Dates
Research investment process open	5 November 2018
KFA1 EOIs and KFA5 PRPs due	21 December 2018
Notification of outcomes and invitation to proceed to FRP	18 February 2019
FRP applications due within SugarNet	1 April 2019
Notification of outcomes	3 May 2019
Contracted project to commence	No earlier than 1 July 2019

Timeline for Transformational Research investment process (dates may be subject to change)

Activity	Key Dates
Transformational Research investment process open	5 November 2018
Transformational Research project concepts due	1 December 2018
Notification of outcomes for Transformational Research project concepts	14 December 2018
Transformational Research PRPs due	25 January 2019
Notification of outcomes and invitation to proceed to FRP	18 February 2019
FRP applications due within SugarNet	1 April 2019
Notification of outcomes	3 May 2019
Contracted project to commence	No earlier than 1 July 2019