### Singapore-Australia Bilateral Programme on <u>"Innovations in Food for</u> <u>Sustainability"</u> 2024

Zoom Info Session – Introduction to Grant Call 16 April (Tue), 11.30am-12.30pm SGT/ 2.30pm-3.30pm AEDT





## **Programme Flow**



02

About CSIRO and A\*STAR

Introduction of 'Innovations in Food for S7-11 Sustainability'



**S12** 

**S3-6** 





## About CSIRO and A\*STAR





#### Who we are

## Australia's national science agency









One of the world's largest multidisciplinary science and technology organisations 5,672+ dedicated people working across 53 sites in Australia and globally State-of-the-art national research infrastructure We delivered \$10.2 billion of benefit to the nation in FY22 Our purpose

## We solve the greatest challenges through innovative science and technology

Health and wellbeing

Food security and quality A secure Australia and region

Resilient and valuable environments

Sustainable energy and resources Future industries

### **About A\*STAR**

## Mission: We advance science and develop innovative technology to further *economic growth* and *improve lives*.

Vision: A **global leader** in science, technology and open innovation

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Integrate our capabilities and collaborate with the wider research community as well as other public sector agencies towards meaningful and impactful outcomes;

We **bridge the gap** between academia and industry in R&D.





Create economic growth and jobs for Singapore;



Contribute to societal benefits such as improving outcomes in healthcare, urban living, and sustainability

For more information, please visit our website: <u>https://www.a-star.edu.sg/</u>



## 'Innovations in Food for Sustainability' Grant Call Details

Focus areas and application details



#### **Programme Objectives** The programme aims to promote research collaboration between Singapore and Australia in 4 priority areas 3 **Production of new** Consumer Acceptance of or novel ingredients: Food Side Stream/ **Nutrition and Health** Fractionation and/or Complementary Protein Precision **/Novel Foods** Fermentation

**Desired Outcomes** 

Gain a greater understanding of the nutritional profiles of novel foods and identify and implement strategies to develop nutritionally balanced products, which may include hybrid and blended products, and; Facilitate consumer acceptance (e.g. addressing communicating innovation, risks and health benefits of novel foods and innovative technologies to consumers).

Develop new or novel ingredients to enable sustainable food production via fractionation and/or precision fermentation to help accelerate delivery to market.





Value add to by-products through food side stream/ waste valorisation and develop value added opportunities for industry.

Engage with industry, government, community and other R&D organisations to achieve greater impact.

## **Application Details**

#### **Eligibility Criteria**

Research project must include the following:

- A CSIRO Principal Investigator
- A Singapore-based Principal Investigator holding a primary appointment of at least 75% in a local publicly funded institution and salaried by the institution
- Must focus on at least one of the programme's priority areas and address at least one of the programme's desired outcomes.

SG- and Aus-based Industry Collaborators

- Optional but strongly encouraged
- Not eligible for funding

#### **Funding Principles**

#### Funding quantum per project:

- AU-based applicants: Up to AUD \$500,000
- SG-based applicants: Up to SGD \$500,000

Note: the project's proposed KPIs must commensurate with the requested funding quantum.

**Tenure:** Up to 24 months from project start date (maximum project duration after accounting for any extension request **must not exceed 24 months**)

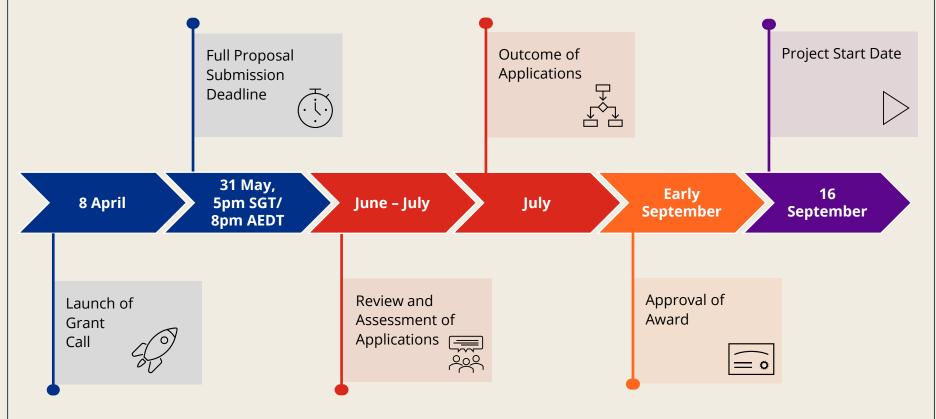
As a guide, we expect that average grants requests will be around \$500,000, i.e, SGD \$250,000 and AUD \$250,000 per project, for projects of up to 2 years' duration.



Note: Singapore-based collaborators are not eligible to receive funding directly and indirectly unless specifically provided for in the grant and approved by Grantor



## **Grant Call Indicative Timeline**



## **Important Details for Applicants**

#### Launch of Grant Call

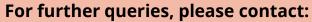
The grant call was launched on **8 April 2024**. Grant call guidelines and application form can be found on:

- A\*STAR <u>A\*STAR Funding Opportunities Webpage</u>
- CSIRO <u>CSIRO Confluence Page</u>

\* There are additional clauses pertaining specifically to Australia-based applicants which will be stated in the CSIRO's confluence page. They will be indicated by asterisks in the grant guideline and all Australia-based applicants must refer to the CSIRO's grant confluence page for compliance.

#### **Full Proposal submission**

- Applicants are to complete all sections of the application form.
- Please appoint one member (either based in Australia or Singapore) from your team to submit the application form and other necessary application materials in **PDF format** via <u>A-STAR\_FNCC@hq.a-star.edu.sg</u>.
- Kindly note that only **1 submission per project team** is permitted.



- Australia-based applicants: IF4S@csiro.au
- Singapore-based applicants: <u>A-STAR\_FNCC@hq.a-star.edu.sg</u>



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## **QnA Session**

Any questions?



Questions submitted via the information session registration form and during the webinar		
S/N	Question	Response
Eligibili	ity Criteria	
1	Is there any limit to the number of co- investigator and collaborators?	No, but the team would need to ensure that the project budget is sufficient to cover the proposed scope of work.
2	Do I have to engage at least an Australian researcher for the project?	Yes, it is mandatory for the research project to comprise of 1 CSIRO PI and 1 Singapore-based PI holding a primary appointment of at least 75% in a local publicly funded institution and salaried by the institution. Please refer to Pg 6 of the Grant Guidelines for more details.
3	Are the Singapore Food Agency and/or Food Standards Australia New Zealand	The Singapore Food Agency is considered as one of Singapore-based public sector research performer.
	(FSANZ) considered as "public sector research performers"?	Only CSIRO researchers are eligible for funding for this grant call. However, Australian-based entities apart from CSIRO including FSANZ are welcome to collaborate with CSIRO researchers. These Australian-based entities would need to provide their own funding for their contribution to the joint project.
4	Are non-CSIRO researchers from other Australia-based organisations (e.g Australian universities) eligible to apply for this grant call and receive funding?	On Australia's end, the Lead Principal Investigator would need to be from CSIRO. We welcome researchers from other Australian-based organizations and universities to collaborate, they would however need to provide their own funding for their contribution to the joint project.
5	Can there be multiple PIs on either the Australia or Singapore side?	No, there should be only 1 lead PI per side, i.e, 1 CSIRO PI and 1 Singapore-based PI. However, there is no limit to the number of number of co-investigator and collaborators as long as the project budget is sufficient to cover the proposed scope of work. Team would need to indicate the work contribution of each PI/Co-I.

S/N	Question	Response	
Indust	Industry Collaboration		
6	Do we need an industry partner? Are there any potential partners that CSIRO has already got in mind, that they have a relationship with?	<ul> <li>Collaboration with industry partner(s) is optional but strongly encouraged. Project is encouraged to demonstrate follow-on industry engagement plans to ensure translational impact/outcomes.</li> <li>Please refer to Pg 7 of the Grant Guidelines for more details.</li> <li>CSIPO is open to suitable industry partners so long as they most CSIPO's</li> </ul>	
		CSIRO is open to suitable industry partners so long as they meet CSIRO's requirements. Please refer to CSIRO's grant confluence page for more details.	
7	What is the expectation (if any) for industry partner involvement?	Applicants are encouraged to engage industry partner(s) to validate the proof of concept or translate the research into higher TRL to benefit the wider ecosystem.	
8	Are industry collaborators limited to Australian or Singapore?	We are looking to fund projects that will create value for Australia and Singapore. While it is not necessary to engage Australia- and Singapore-based industry partners, applicants would need to articulate how the industry partner could potentially value add to the project and Australia/Singapore, especially with regards to economic outcomes (e.g. jobs, business activities in either country).	
9	If an Australia-based industry partner provides in-cash contribution for the Australia component of the joint project, does this affect the amount of funding from A*STAR to the Singapore side?	No. In-cash contribution from either Australia- or Singapore-based industry partner would be in addition to and would not affect CSIRO and A*STAR matched funding to the Australia and Singapore-based research applicants.	

S/N	Question	Response
Industry Collaboration		
10	Is there any expectation on the type of contribution (e.g. in-cash or in-kind) from the industry collaborators?	Industry collaborators are expected to provide their own funding for their contribution to the joint project, and this can be either in cash or in kind. Cash contribution would be favourable to further ensure industry adoption.
Grant (	Call Topics	
11	Are there clear priority areas for the program?	<ul> <li>Yes. The 4 priority areas are:</li> <li>Production of new or novel ingredients: Fractionation and/or Precision Fermentation</li> <li>Nutrition and Health</li> <li>Consumer acceptance of Complementary Protein/Novel Foods</li> <li>Food Side Stream/Waste Valorisation</li> <li>Please refer to Pg 5 of the Grant Guidelines for more details on the programme's priority areas and objectives.</li> </ul>
12	Can the processing be beyond fractionation and fermentation?	No, the grant call is looking at developing new or novel ingredients to enable sustainable food production via fractionation and/or precision fermentation to help accelerate delivery to market. Please refer to Pg 5 of the Grant Guidelines for more details.
13	Can the food waste valorisation be any potential food waste generated in Singapore, or have to be the side- streams from novel food production?	It may not necessarily need to be from novel food production.

S/N	Question	Response
Grant	Call Topics	
14	Is food waste valorised to enhance urban farming production considered?	Yes, as long as there is value add to the by-products and benefits the urban farming industry.
15	Can you define precision fermentation further? Does microbial biomass fermentation fall under precision fermentation?	Yes, it would be considered to be under the precision fermentation category if you are proposing a project that involves fermenting a microbial biomass to develop new or novel ingredients to enable sustainable food production.
16	Regarding the grant call's priority area on 'food side stream/waste valorisation', does the scope cover the conversion of waste into products that contribute back to the food chain, or does it cover other industrial sectors such as speciality chemicals?	While we don't limit the scope of the proposed project, we highly encourage applicants to focus on food applications as the end outcome in line with the focus of this grant call on 'Innovations in Food for Sustainability'.

S/N	Question	Response
Others		
17	How many projects will be funded?	We will fund projects based on merit. We expect that average grants requests will be around \$500,000, i.e, SGD \$250,000 and AUD \$250,000 per project. Applicants are welcome to submit a joint research project that addresses more than 1 of the grant call's priority areas.
18	Is there assistance available to match with Singaporean partners?	Applicants may wish to reach out to CSIRO ( <u>IF4S@csiro.au</u> ) for assistance to connect with Australia-and Singapore-based partners who attended the information session, and indicate the grant call priority areas they are interested in and potential areas of collaboration.
		For assistance to connect other with other Singapore-based researchers, applicants may wish to write to A*STAR ( <u>A-STAR_FNCC@hq.a-star.edu.sg</u> ), and we will assist to connect with the Research Offices of the relevant Singapore-based public sector research performer where possible.
19	Is there provision for CSIRO work to continue beyond June 2026, e.g. writeup?	The project needs to be up to 24 months from project start date (maximum project duration after accounting for any extension request <b>must not exceed 24 months</b> ). CSIRO's research work needs to be completed within this period.
		Please refer to Pg 6 of the Grant Guidelines for more details.
20	Is there a clear framework on which Australia and Singapore will work under for research development?	The team members should demonstrate synergy in capabilities and interests in their proposal and ensure they meet the project's deliverables and KPIs.

S/N	Question	Response
Othe	rs	
21	Are the research projects expected to achieve translational impact?	Yes, applicants are highly encouraged to ensure that their research projects achieve translational impact. This can be measured by KPIs and Tracking Indicators, such as follow-on engagements with industry partners, patents and licenses and etc.
22	What is the expected model for IP management, particularly when one or more industry partners are engaged?	Applicants are expected to discuss IP management with the various stakeholders (e.g., Australia and Singapore researchers and industry partners, if any). Please refer to Page 19 of the Application Form for more details.
23	Can we include both manpower and equipment in the budget?	Yes, there is a field for the applicants to fill in under the budget request section in the application form. However, applicants would need to provide strong justifications for this budget request and is subject to approval by the grantor. Please refer to Page 16 of the Application Form.
24	Can an equipment be sourced from an Australia- or Singapore-based industry partner?	There is no specific restriction on the origin of equipment. The rationale behind the equipment purchase and relevance to the research project will be evaluated during proposal review.
25	Does the scope of the grant call cover fundamental research (e.g. mechanistic study), or only translational research?	Applicants are highly encouraged to ensure that their research projects achieve translational impact or be taken up by the industry for further development through industry funding. If fundamental research is required to ensure translational outcomes, it could be
		funded on condition that applicants would need to demonstrate clearly that translation pathway, i.e., how the research work could benefit the industry by the end of the project duration.

S/N	Question	Response
Others		
26	What is the grant application cycle? Is it yearly?	Currently, there is only cycle. The submission of proposal applications is open from 8 April to 31 May 2024, 5pm SGT/8pm AEDT.
27	ls there a limit to the number of proposals a researcher or an institution can submit?	No, there is no limit. However, if a PI submits more than 1 proposal, they should ensure that they are able to commit to and fulfil the roles and responsibilities across the multiple proposals.
28	The grant call title has reference to 'sustainability'. Is sustainability assessment under the project scope?	Yes, the sustainability assessment would need to be a component of the project focusing on at least one of the 4 priority areas of the grant call.
29	What does 'selection criteria references "benchmark[ing] economic value creation from public sector research" ' mean?	The grant call focuses on sustainability and impact. When assessing the proposal application, the reviewers will look out for the potential value creation of the research project. There is no specific quantum or measurables assigned as the value creation would differ for each proposed project.
		Applicants are encouraged to provide the quantitative/qualitative impact of the technology if implemented following the success of the project, in the application form. Please refer to Page 11 of the Application Form.

## **Thank you!**

