

Singapore Food Story R&D Programme

Theme 3 Competitive Grant Call



3 Thematic Areas under the Singapore Food Story (SFS) R&D Programme

Implementing Agency: SFA

I. Sustainable Urban Food Production

Expected Outcomes: Increase productivity; lower resources & operation cost; improve disease & health management; improve nutritional quality of produce





Disease & Health Management

Nutrition

With elements of: Smart sensors for urban production systems



Nutrient & quality preservation for farm produce



Discovery

Computational Biology

Microbial Protein

Cultured Meat

Translational

Implementing Agency: A*STAR

II. Future Foods: Advanced Biotech-based

Protein Production

methods; position SG as a leading alternative protein R&D

hub; enable circular bio-economy, improve sustainability.

Expected Outcomes: Develop novel biotech-based





Scale-Up

Plant Protein

Pre-Pilot Model

III. Food Safety Science & Innovation

Expected Outcomes: Address emerging challenges in food safety and quality through science, develop new food standards



Food Safety Science for Emerging Risks 🌍



Intelligent Supply Chain

Understanding Consumer Behaviour towards Food



Implementing Agency: A*STAR; Supported by: SFA; FRESH hosted at NTU



Singapore Food Story Theme 3 Competitive Grant Call on Food Safety & Consumer Science

Event	Dates
Theme 3 Grant Webinar Workshop	Friday, 6 August 2021
Grant Call Launch	Friday, 20 August 2021
Full Proposal Submission Deadline	Monday, 4 October 2021*
Notification of Evaluation Results	January 2022
Letter of Award Issuance	March 2022
Project Start Date	April 2022

*Proposals must be submitted to the SFS JPO at <u>a-star_SFSRND@hq.a-star.edu.sg</u> by 6pm, Monday, 4 October 2021. Late submissions will not be considered.

➤ Grant Topics:

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- 1. Food Safety Science & Innovation
- 2. Consumer Science & Risk Communication

Grant Funding Quantum: Up to \$2M per project/proposal (inclusive of 20% indirect costs) up to three years

Food Safety & Consumer Science Grant Call

• In this grant call, applicants are highly encouraged to address the grant call topics on food safety and consumer science. Meritorious proposals in other relevant and highly related areas provided in this deck will also be considered.

• The objectives of the grant topics are:

- Food Safety Science & Innovation
 - To develop fit-for-purposes methods to identify and assess emerging safety risks of novel foods, food related technologies and new food production and processing techniques
- Consumer Science & Risk Communication
 - Understand and educate consumer perceptions of new food innovations to facilitate improved acceptability of novel foods through the development of public communication and education tools and strategies
- Projects should demonstrate applicability to existing and potential market gaps in food safety and consumer science in the areas of novel foods, food tech, food production and processing.

Food Safety & Consumer Science Grant Call

Grant Topic: Food Safety Science & Innovation



Sub-Themes:

- Holistic food safety assessment methods and testing platforms for urban agri-and tropical aquaculture technologies and novel foods (e.g. alternative proteins);
- Toxicity and Allergenicity prediction & management for novel foods (e.g. alternative protein);
- Risk benefit models and applications to food safety assessment; and
- Comprehensive reviews on scientific basis and justifications for current food safety risk assessments of novel foods.

Food Safety & Consumer Science Grant Call

Grant Topic: Consumer Science & Risk Communication



Sub-Themes:

- Achieve social licensing and public trust
- Novel food risk communication (assessment, mitigation, perception and management) and consumer message mapping to prevent misconceptions, backlash and negative sentiments against foodtech, processed foods, novel foods (e.g. alternative proteins)
- Consumer science behaviour, perception, acceptance, dietary habits and prediction of consumer sentiments towards novel foods (e.g. alternative protein). Stratifying consumer risk profiles and demographic influence (social, economic status) on consumer behaviour.
- Addressing consumer knowledge gaps in novel food science and consumer sentiments toward naming/marketing/terminologies of novel foods.
- Derivation of socially friendly communication messages that build consumer trust in novel food science

Grant Exclusions



Food Safety Science & Innovation:

- Whole-genome sequencing of plants/crops, aquaculture, microbial species and pathogens without direct applications and linkages in food production
- General food safety testing assays and methods (for food manufacturing also)
- General food/environmental contamination testing methods & surveys (e.g. nanoparticles, microplastics, plasticisers).
- Bioinformatics analytics as a standalone technology
- Taste and sensory studies for novel foods (e.g. alternative proteins)

Consumer Science & Risk Communication:

 General standalone consumer perception and behavioural studies in food; linkages to risk communications and communication strategies relating to novel foods and alternative proteins preferred

Proposal Evaluation

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- This grant call is aimed to address the existing and potential capability gaps in the area of Food Safety & Consumer Science relating to novel foods (e.g alternative proteins), urban agri- and tropical aquaculture technologies
- > The outcomes and deliverables of the grant topics are:
 - Food Safety Science & Innovation
 - To develop fit-for-purposes methods to identify and assess emerging safety risks of novel foods, food related technologies and new food production and processing techniques
 - Consumer Science & Risk Communication
 - Understand and educate consumer perceptions of new food innovations to facilitate improved acceptability of novel foods through the development of public communication and education tools and strategies

>The proposal will be evaluated based on, but not limited to, the following criteria:

- Potential Contribution to Grant Objectives;
- Addressing existing potential gaps in Food Safety Science and Novel Food Risk Communication;
- Scientific Excellence, Innovation and Successful Objectives; and
- ➢ Relevance to the Singapore Food Story
- A proposed list of KPI indicators to be fulfilled by the grant can be found in the proposal template.

Proposal Requirements and Funding

- Proposed projects should not exceed 3 years in duration. Each successful project may be granted up to <u>SGD\$2M</u> (inclusive of 20% indirect costs).
- The funds from this grant call will be disbursed on a **reimbursement basis**.
- IHLs, public sector agencies, not-for-profit organisations and research laboratories in Singapore can qualify for up to 100% funding support of approved qualifying direct and indirect costs of a project.
- Final funding support and amount will be at the sole and exclusive discretion of the SFS JPO based on the scope and projected outcomes of the research.
- All R&D work must be conducted in Singapore, and all assets acquired with the funding must be located in Singapore and maintained within the control of the Institutions.
- Applicants shall comply with national regulations as well as A*STAR's Terms and Conditions and <u>National Research Fund Guide</u>.
- Intellectual Property (IP) management: All researchers and research organisations shall follow and apply the National IP Protocol principles and framework.

Application Process

Full proposal Submission

- All completed and endorsed applications must be submitted via email to the SFS Joint Programme Office at <u>a-star_SFSRND@hq.a-star.edu.sg</u> by <u>6pm, Monday, 27 September 2021</u> (Singapore Time).
- All applications must be endorsed by the Director of Research or the equivalent for the Lead Principal Investigator's Host Institution.
- Late submissions, incomplete submissions, submissions via other avenues (e.g. walk-in), and submissions without proper endorsement will not be accepted.
- More details on the Grant Call will be released in August 2021 at <u>https://www.a-star.edu.sg/Research/funding-opportunities/</u>
- For further enquires, please email the SFS JPO at <u>a-star_SFSRND@hq.a-star.edu.sg</u>.

FAQs

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- 1. Who is eligible for the funding?
 - IHLs, public sector agencies, not-for-profit organisations and research laboratories in Singapore are eligible for this grant call. Companies are highly encouraged to participate in this grant call as collaborators. Collaborators do not receive any direct funding.
- 2. What is the mechanism for fund disbursement?
 - The funds are disbursed on a reimbursement basis. There will <u>not</u> be any grant advancement for the project.
- 3. Will proposals that fall outside the two grant topics be funded?
 - Applicants are highly encouraged to address the grant call topics on food safety and consumer science. Meritorious proposals in other relevant and highly related areas provided in this deck will also be considered. Please also refer to the list of exclusion topics are included in this deck.
- 4. What is the evaluation criteria?
 - The proposals will be evaluated based the contribution to the grant objectives, the scientific excellence, idea innovation, applicability of outcomes, competency of the research team etc.
- 5. When can I start working on the project?

> The projects are tentatively scheduled to start on 1 April 2022.