

# National Alternative Protein Innovation Centre Collaborative Programme Funding

# Call Guidance: Proof of Concept 2 (PoC 2)

v1.0 (April 2025)

#### 1. Background

NAPIC Collaborative Programme Funding (CPF) is for projects to support the alternative protein sector on their innovation journey leveraging the UK's world-leading science and innovation strengths in alternative proteins. All project proposals will be considered and ranked based on their merit resulting in a high-quality portfolio of projects.

NAPIC has allocated a pot of  $\pounds 4$  million to fund UKRI funding-eligible academia and research organisations to work collaboratively to facilitate the delivery of a diverse array of innovation challenge-driven projects. This funding will be allocated through several calls over the next 4 years.

Funding will be allocated to UK Research organisations who will work collaboratively to:

- Accelerate groundbreaking research
- Deliver innovation challenge projects
- Overcome technical, regulatory, market hurdles
- Address science driven reformulations
- Maximise impact

#### 2. Purpose

The Proof of Concept funding opportunity supports early-to-mid stage commercialisation activities that validate the development of concepts that have arisen from research. There are two tiers of Proof of Concept (PoC) projects - PoC 1 funds larger research and innovation challenges. PoC 2 funds smaller, shorter projects.

This call guidance relates to PoC 2.

Projects will be expected to develop a concept, idea or technology from any alternative protein sector which can be in a laboratory, model or real world setting to give confidence for further work. The PoC programme is not aimed at basic research, but is expected to build on existing research, findings or technology and show how the collaboration will move the research towards practical exploitation in a specified application. The project may be the first between a set of collaborators or may come from an existing relationship.



NAPIC CPF funding is not intended to fund Studentships or student resource. Studentships and student resource are ineligible costs and may not be requested or included in your application.

#### 3. Scope

Projects will support the development of innovative solutions to address significant challenges in alternative proteins within the UK AgriFood sector.

All projects must relate to alternative proteins. This includes proteins from plants, microbes (fungi, bacteria), insects, food waste, aquaculture (aquatic plants, seaweeds, micro/macroalgae), cultivated meat and dairy, and proteins produced using precision fermentation.

Applications can address a range of areas, including food, feed, ingredients, services, equipment and systems development, nutrition, and environmental sustainability.

NAPIC will fund projects addressing the following innovation challenges faced by the alternative protein sectors:

- 1. **Unlocking Nature's Potential** Boosting protein quality and quantity from the complete biome i.e., plants, microbes (fungi, bacteria), insects, food waste, aquaculture (aquatic plants, seaweeds, micro/macroalgae)
- 2. **Protein Discovery** Identifying important peptides present in traditional proteins that offer the desired functionality, mouthfeel and nutritional benefits and replicating these in alternative proteins, through cutting-edge tools
- 3. Structuring for Functional and Nutritional Benefits Structuring alternative proteins using colloidal expertise including microgelation, targeted enzymatic fragmentation, creation of cultivated meat, hybrid technologies, and health-led formulation to enhance finished product functionality, whilst improving nutritional value, minimising allergenicity and sensory issues
- 4. **Enabling Sustainable Bioprocessing at scale** Accelerating industrial alternative protein production, bringing costs down by deriving best practice from fermentation-intensive industries, developing optimisation tools supporting the transition towards continuous processes that improve efficiency and reduce manufacturing footprint
- New metrics and standards for product quality and environment Creating standardised and validated new metrics to quantify technical, nutritional, sensory, quality and safety of alternative proteins, objectively
- 6. **Acceptability and accessibility** Encouraging consumer behavioural shifts across a wide range of age, culture and socioeconomic status towards acceptance of alternative proteins, including cultivated meat



#### 4. Eligibility

To be eligible for NAPIC PoC 2 funding, applicants must comply with the following requirements:

- The project lead must be a <u>UKRI eligible research organisation</u>
- The project lead must collaborate with at least one non-research partner which must be one of the following UK registered:
  - o business of any size
  - o public sector or non-ministerial government department
  - charity
  - not for profit
- The project lead must attach a letter of support from the Head of School or Commercial Director as appropriate
- The non-research partner(s) should either be registered in the UK or have a UK research and development or manufacturing site
- The non-research partner(s) must be able to provide a minimum of 50% match funding as cash or in-kind
- If there is more than one non-research partner, the non-research partners share the 50% match funding requirement.
- If successful, participants will be required to register for NAPIC Membership
- Any individual can only be project lead on 1 application per funding stream, per round

#### 5. Funding

£600k funding is available from NAPIC to fund PoC 2 projects in this call.

We will fund projects lasting between 6 and 12 months with a <u>total project value</u> (TPV) of up to £100K. This is split equally into the <u>grant value</u> (GV) and a mandatory contribution from the non-research partner(s). NAPIC will award the GV at 80% FEC to the research organisation. Partner contributions can be cash or in-kind for this stream of funding.

#### 6. Eligible costs

Eligible costs include investigator / researcher time, travel and subsistence appropriate to the delivery of the project and consumables. Subcontracting costs are allowed at a maximum of 20% of the total project cost. Subcontractors must be UK-based. Please refer to UKRI guidance on subcontracting, available here: Collaborations – BBSRC – UKRI.

Studentships or student resource are ineligible costs and may not be requested or included in applications for NAPIC CPF funding.

For further information on eligible costs visit:

- <u>Directly allocated costs BBSRC UKRI</u>
- Directly incurred costs BBSRC UKRI



#### 7. How to apply

All applications must be submitted via the online application form.

Please complete the online application by Friday 11<sup>th</sup> July 2025 16:00 UK time. Applications received after this time will not be considered. Please do not send us your application via email/mail.

The collaborative application should be jointly written but must be submitted by the project lead (Research organisation) via the online portal.

#### 8. Supporting Documentation and Information

Please fill in the application form with as much information and as accurately as you can, within the word limits specified. The information we ask for will help our reviewers and panel to evaluate your project.

You are requested to provide your research institution's financial approval as a Letter of Support and all partners must complete the partner contribution declaration. Please start to obtain these as soon as you can.

Please ensure that your costings include a detailed breakdown rather than headline figures for staffing, materials, etc.

The following documents must be provided with your application:

- Outline Project Plan
- Completed Finance template
- Research Organisation Letter of Support
- Non-research Partner Contribution Declaration
- Intellectual Property Plan
- EDI questionnaire

#### 9. Key Dates

Call opens: Monday 12<sup>th</sup> May 2025, 10:00 UK time

Call closes: Friday 11th July 2025, 16:00 UK time

Decisions and offer letters will be provided by October 2025.

#### 10. Review of applications

All eligible applications submitted will be reviewed by three external reviewers followed by consideration for funding by NAPIC's Funding Evaluation Panel comprising representatives from NAPIC's Advisory Boards. NAPIC's Non-Executive Board (NEB) will make the final decision on projects to be funded.



Notifications of the outcome of applications will be sent to Lead Applicants. Feedback will be limited to a statement of success or otherwise unless the group decides that additional feedback is necessary or useful.

NAPIC reserves the right to apply a 'portfolio' approach. The portfolio can be spread across a range of NAPIC:

- Focus areas
- Pillars
- Innovation Challenges
- Sectors
- Project durations
- Locations

The 'portfolio approach' is used to make sure that funds are allocated across the strategic areas identified in the scope of the funding call. This may mean that a proposal that scores less than yours is successful.

#### 11. Terms and conditions

The University of Leeds contracts team, on behalf of NAPIC, will generate a Sub-Award Letter for each successful project. UKRI (UK Research and Innovation) Standard Terms and Conditions apply.

#### 12. Collaboration Agreement

The lead organisation is required to ensure all partners have signed the collaboration agreement, formalising the relationship between the project partners.

#### 13. Privacy notice

The NAPIC team will monitor the demographic data of applicants for reporting to UKRI if needed. The responses to the questions will be collated across all applicants. Your personal information will not be shared, nor any identifiable data. For all questions, a 'not disclosed' option is available, should this response be the preferred option. Public summaries of successful projects might be used on a public-facing webpage and should be written accordingly.

#### 14. Contact us

For any queries regarding this call, please contact us at <a href="mailto:funding@napic.ac.uk">funding@napic.ac.uk</a>.



## **Application form A: Proof of Concept 1 and 2**

## **APPLICATION TEMPLATE**

This template is provided to support the development of your application, and includes all questions required.

Applications will only be accepted through the online application forms, unless otherwise agreed with NAPIC in advance.

Please use this template to construct your application and then copy your answers into the online application form.

## Part 1: Applicant Details (this part is not scored)

Please ensure that you complete the entire form in one session. Exiting the form before completion will result in the loss of all entered information.

\*mandatory questions

## **Lead Applicant Details**

First name \*

Last name \*

Mobile phone number \*

Email \*

Address <sup>1</sup>

Research Organisation Name \*

Website URL

Are you a NAPIC partner? \* Dropdown: yes, no, I don't know

Have you applied previously for NAPIC funding? \* Drop down: yes, no

Co-Investigator(s) Please include the full name and role of any Co-I's involved at the Research Organisation. Separate multiple individuals with a semi-colon.

EDI Template attachment \* Please complete the EDI monitoring template and attach to the application

### **Partner Details**

For Proof of Concept, Demonstration, Innovation Sprint and Networking Award projects, the project lead must collaborate with at least one non-research partner which must be one of the following UK registered: business of any size, public sector or non-ministerial government department, charity or not for profit.

Name of Partner \*
Partner Website \*
Partner Registered address \*
Partner Company Registration No. \* If this does not apply, for example if your partner organisation is a charity, please enter "N/A"
Partner Annual Turnover \* If this does not apply, for example if your partner organisation is a charity, please enter 1
Partner Headcount \* If this does not apply, for example if your partner organisation is a charity, please enter 1
Are they classed as an SME? (Partner) \* Drop down: yes, no
Are they a NAPIC Partner? (Partner) \* Dropdown: yes, no, I don't know
Have they applied previously for NAPIC funding? (Partner) \* Drop down: yes, no
Contact First Name (Partner) \*
Contact Last Name (Partner) \*
Contact Position (Partner) \*
Contact Email (Partner) \*

#### **Additional Partners**

Please add additional partner details below, if any.

For Proof of Concept, Demonstration, Innovation Sprint and Networking Award projects, the project lead must collaborate with at least one non-research partner which must be one of the following UK registered: business of any size, public sector or non-ministerial government department, charity or not for profit.

Additional Partner 1
Additional Partner 1 Website
Additional Partner 1 Registered address
Additional Partner 1 Company Registration No.
Additional Partner 1 Annual Turnover
Additional Partner 1 Headcount
Are they classed as an SME? (Additional Partner 1) Drop down: yes, no
Are they a NAPIC Partner (Additional Partner 1) Dropdown: yes, no, I don't know
Have they applied previously for NAPIC funding? (Additional Partner 1) Drop down: yes, no
Contact First Name (Additional Partner 1)
Contact Last Name (Additional Partner 1)
Contact Position (Additional Partner 1)
Contact Email (Additional Partner 1)

Additional Partner 2
Additional Partner 2 Website
Additional Partner 2 Address
Additional Partner 2 Company Registration No.
Additional Partner 2 Annual Turnover
Additional Partner 2 Headcount
Are they classed as an SME? (Additional Partner 2) Drop down: yes, no
Are they a NAPIC Partner (Additional Partner 2) Dropdown: yes, no, I don't know
Have they applied previously for NAPIC funding? (Additional Partner 2) Drop down: yes, no
Contact First Name (Additional Partner 2)
Contact Last Name (Additional Partner 2)
Contact Position (Additional Partner 2)
Contact Email (Additional Partner 2)

### Collaboration

How did you establish the collaboration with project partner(s) \*

Drop down: existing collaboration, existing but newly collaborating due to funding call, new contact made via NAPIC events or introduction, other

Please confirm that you have not applied for funding from any other funding streams for this project \*

Tickbox

# **NAPIC Alignment**

NAPIC themes - please indicate the thematic areas relevant to this project (tick all applicable)

#### Pillar \*

Multiple choice, tick all that apply:

- Perform: Control pre- and post-consumption product performance overcoming current bottlenecks in alternative protein
  functionality. The PERFORM pillar will employ multiscale approaches, from validated in vitro, in silico, in vivo (production, animal
  feed trials, human nutrition studies and consumer studies incorporating machine learning) tools, to predict, define, control and
  demonstrate 'pre-production-to-biological' performance of alternative protein foods and feeds.
- Produce: Enable partners to produce alternative protein ingredients of optimum functional and nutritional quality, delivering technofunctional, sensorial and nutritional performance in final products, while supporting a just-transition from unsustainable animal production. This pillar will create new value chains using advanced (bio)technological and modern biological tools, circular bioeconomy approaches, selection of new/underutilised plant/fungal/algal/insect proteins, and re- purposing strategies to create the next-generation of alternative proteins.
- Process: Use boundary-pushing physical, bioengineering and cellular processes that minimise carbon footprints, to discover and
  manufacture alternative proteins and healthy products providing economies of scale. PROCESS pillar will employ precision
  fermentation, cell factories, new extraction/fractionation technologies and artificial intelligence model-guided scale-up to optimise
  alternative protein processes.
- People: Guide consumer dietary behaviour towards more sustainable and healthy alternative protein products. Using behaviour
  change techniques and consumer insight methods (e.g. choice experiments), the PEOPLE pillar will inform commercial and
  educational strategies to increase acceptance of alternative proteins and shape the types of products/ingredients most likely to be
  accepted by future consumers, providing new training and business opportunities for UK farmers and SMEs.

#### Innovation Challenge \*

Multiple choice, tick all that apply:

- Unlocking Nature's Potential Boosting protein quality and quantity from the complete biome i.e., plants, microbes (fungi, bacteria), insects, food waste, aquaculture (aquatic plants, seaweeds, micro/macroalgae)
- Protein Discovery Identifying important peptides present in traditional proteins that offer the desired functionality, mouthfeel and nutritional benefits and replicating these in APs, through cutting-edge tools
- Structuring for Functional and Nutritional Benefits Structuring APs using colloidal expertise including microgelation, targeted enzymatic fragmentation, creation of cultivated meat, hybrid technologies, and health-led formulation to enhance finished product functionality, whilst improving nutritional value, minimising allergenicity and sensory issues
- Enabling Sustainable Bioprocessing at scale Accelerating industrial AP production, bringing costs down by deriving best practice
  from fermentation-intensive industries, developing optimisation tools supporting the transition towards continuous processes that
  improve efficiency and reduce manufacturing footprint
- New metrics and standards for product quality and environment Creating standardised and validated new metrics to quantify technical, nutritional, sensory, quality and safety of APs, objectively
- Acceptability and accessibility Encouraging consumer behavioural shifts across a wide range of age, culture and socioeconomic status towards acceptance of APs including cultivated meat

#### Focus Area \*

Multiple choice, tick all that apply:

- Precision fermentation
- Cultivated meat
- Valorising Natural Kingdom (plant-based, bacterial, fungal)
- New Alt Food Production Systems (insects, novel aquaculture, algal, protozoa)

#### Sector \*

Multiple choice, tick all that apply:

- Ingredients Food
- Feed
- Service
- Equipment & Systems
- Other Protein Technologies

# Responsible Research and Innovation and Impact

#### Please indicate RRI areas relevant to this project \*

Multiple choice, tick all that apply:

- Public Engagement: will you involve the public and relevant stakeholders in the research process? This could include activities such as public consultations, citizen science initiatives, or the establishment of an ethics advisory board.
- Open Science: will you promote open access to research data, publications, and tools? Will you consider adopting open science practices such as pre-registration of studies or sharing research materials?
- Equality, diversity and inclusion: will this project promote and enhance equality, diversity, and inclusion within the target community and/or among project participants.
- Ethical Considerations: Will you address potential ethical challenges and risks associated with the research? This could include
  obtaining informed consent, protecting participant privacy, and considering the potential societal impacts of the research
- Governance: Will you ensure responsible governance of the research project, including transparent decision-making processes and accountability mechanisms?

#### Impact this project is expected to create. \*

Multiple choice, tick all that apply:

This will need to be verified in the final report and requested through follow on impact reporting. Please indicate all impacts relevant to this project

- Creation of new knowledge for knowledge base
- Jobs created / safeguarded
- Private sector investment
- New capabilities
- IP (new patents, designs, trademarks or copywrite) expected
- Expected new or improved products, services or processes launched
- Public sector funding applied for now or in the future
- Potential for further exploitation of results
- Other please provide details

## Part 2 - Project details

Project Title \*

Estimated Start Date \*

Funding Category \* Dropdown: Proof of concept 1, Proof of concept 2:

Are human trials required \* Dropdown: Yes, No

Project summary (max. 500 words) \*

Please provide an overview of your project. This will remain confidential and will be used for review only.

#### Public Description \*

Describe your project in detail and in a way that you are happy to see published. Do not include any commercially sensitive information. If we award your project funding, we will publish this description. This could happen before you start your project.

## **Application Questions**

The next 10 questions will be scored All questions will be scored out of 5, maximum score 50. Maximum 400 words per section

#### Question 1 - Team (Weighting 10%) \*

Please describe both the Research and Industry partner(s) expertise, the project team roles noting any early career researcher involvement and describing the strength of this collaboration. Please demonstrate how the consortium has the science, excellence and capability to undertake this project.

#### Question 2 - NAPIC alignment (Weighting 10%) \*

Please describe how your project meets the aims of NAPIC, aligning these to the NAPIC components in Part 1.

#### Question 3 – Project Management (Weighting 5%) \*

How will you manage this project? Please describe your approach to project management and the project management methodology you will use. Question 3.5 - Please attach an outline project plan detailing interdependencies, milestones and deliverables. \*

#### Question 4 – Aims and objectives (Weighting 10%) \*

Please explain the aims and objectives of this project, highlighting the key technologies and innovations being developed and explored.

#### Question 5 – Innovation challenge (Weighting 20%) \*

Please describe the translational or business challenge your project aims to overcome including the pathway to commercialisation. Outline the business need, technological challenge or market opportunity, that the project seeks to address.

#### Question 6 - Sustainable research (Weighting 5%) \*

How will the research be delivered in a sustainable way?

Describe how your approach to research is sustainable, through reduced environmental impact, and increased social and community benefits.

#### Question 7 – Responsible Research and Innovation (Weighting 5%) \*

Please describe how your project will incorporate RRI principles as described in Part 1.

#### Question 8 - Impact (Weighting 20%) \*

Please outline the expected impacts of this project, aligning your response with the information provided in Part 1. Describe how the project could create economic and societal impacts in the short, medium, and long term. Additionally, explain how the impact will be measured and recorded beyond the life of the project.

For economic impact, describe the likelihood of commercialisation and the route to market adoption and impact post-project. Demonstrate your project idea is financially sustainable.

#### Question 9 - Risks (Weighting 5%) \*

Please summarise the key risks along with the corresponding mitigation strategies you have put in place.

#### Question 10 – Value for money (Weighting 10%) \*

How will you spend your grant funding and how does this represent good value for money for the taxpayer? Explain your total project costs, the costs you are requesting and how the industry partner will finance their cash / in-kind support contribution to the project. Explain how this project represents value for money for you and the taxpayer.

## Part 3 - Financial Section

Please provide finance information according to the finance costing and letter of support.

Lead research organisation project cost and funding, covering the 100% FEC grant value (GV) portion of the Total Project Value (TPV). See call guidance for GV and TPV definitions.

This application should be fully costed and approved by lead Research Organisation's finance office. Please liaise with the departmental finance team to obtain a costing for this proposal, which must be provided along with this application.

Each named or identifiable individual (from post name) included on this form should be made aware that

- You have shared their personal information with NAPIC
- NAPIC will process their personal information for the purposes of assessing the application and management of any funding awarded.

If successful you will receive 80% of the full economic cost, this should be the amount shown in funding applied for column.

#### **Proof of concept 1**

- Total project value £200K
- Grant value allowable £100K (100% FEC)
- NAPIC funding allowable £80K (80% FEC)
- 50% TPV cash contribution is mandatory from industry partner(s)

#### **Proof of concept 2**

- Total project value £100K
- Grant Value allowable £50K (100% FEC)
- NAPIC funding allowable £40K (80% FEC)
- 50% TPV contribution is required from industry; a mix of cash and in-kind is allowable

Eligible costs include investigator / researcher time, travel and subsistence appropriate to the delivery of the project and consumables. The costing of PhD student time and resource is not eligible. For the full list please use links below:

Directly allocated costs - BBSRC - UKRI

Directly incurred costs - BBSRC - UKRI

#### **Templates**

Please populate the <u>Finance Template</u> in accordance with the departmental finance costing and letter of support, and attach below.

Please populate the <u>Partner Contribution Template</u> and attach below. You will have to upload a separate document for each partner.

# **Supporting Documents**

Financial Information \*
Partner Contribution Declaration \*You may upload multiple documents at once.
Lead Research Organisation Letter of Support \*
Intellectual Property Plan \*