EPST-FORWAPO

## SYMPOSUM

PANTBASEDFOO

overview

Plant2Food | AgriFoodTure | Plant-based Food Grant | GUDP

Retox-Pro | MiCop | AQRIFood | HyCheese | FutureDairy | Figo | Valuekelp | Tempeh

## **Hello!** Plant2Food, AgriFoodture, Plant-Based Food Grant and GUDP welcome you to the Fast-forward Plant-based Food Symposium!



what		when
Arrival	Registration and refreshments	09:00 - 09:30
Welcome	Welcome by the moderator, Ida Ebbensgaard, journalist, moderator.dk	09:30 - 09:35
Keynote	Keynote speaker; Frank D Haagensen, PhD, Head of Global Applications, Plant Based Dairy, Novonesis	09:35 - 10:00
Purpose	Introducing the purpose of the series of symposia by Thomas de Bang, Senior Sci- entific Lead at Novo Nordisk Foundation	10:00 - 10:10
Funding	Overview of funding opportunities for supporting research and innovation in plant-based food  • Plant2Food  • AgriFoodTure  • Plant-Based Food Grant  • GUDP	10:10 - 10:45
Pitches	Pitches from funded projects within all the platforms	10:45 - 11:45

#### **ABOUT PLANT2FOOD**

vision

Plant2Foods vision is to accelerate the transition to more sustainable, plant-based food systems, which are healthy for both the planet and its population, by building a leading hub for plant-based food research and innovation.

mission

The mission is to increase the productivity and profitability of plant-based food production industries, creating a food system that works within the planetary boundaries based on high-levels of circularity and environmentally friendly production systems.

objective

To enable inter- and transdisciplinary collaborations between industry and academia by supporting use-inspired fundamental research that fosters downstream and open innovation within plant-based foods.

focus areas

Plant2Food facilitates and funds precompetitive research projects inspired by industry needs, challenges and ideas within three specific research areas:

- · Plant Raw Material.
- · Refinery & Processing.
- · Food & Health.

specifics

**Project length:** 1–3 years. All projects must be finalized by the end of 2027. **Investment per project:** From minimum DKK 1 million to DKK 8 million. **Specific criterias:** Plant2Food supports open, patent-free, and pre-competitive projects within plant and food science. All projects must be co-created by academic and industry partners, with the purpose of accelerating the development of sustainable technologies and solutions for new nutritious, tasty, and affordable plant-based foods.

trl

Technology Readiness Level (TRL): TRL 1 to TRL 3.

#### who can apply

Tenured researchers from one of the four partner universities (AU, UCPH, DTU, WUR) must be the main applicant. All projects must include at least one or more industry partners and collaborators from other knowledge institutions.

#### expected outcome

Fundamental knowledge underpinning sustainable agri-food production that will drive the downstream development of novel solutions contributing to reduced greenhouse gas (GHG) emissions and land-use, while promoting healthy lifestyles by increasing the relative content of plant-based commodities in the general diet.

## **ABOUT AgriFoodTure**

#### vision

AgriFoodTure wants to position Denmark as the leader for innovative, disruptive solutions that enable the green transition of the agri-food system and contribute to:

- Achieving a 70% reduction in greenhouse gas emissions in Denmark by 2030 and net-zero emissions by 2050.
- Protecting the environment and supporting Danish nature and biodiversity.
- · Increasing the competitiveness of Danish business and industry.

#### mission

The mission is to power a new generation of green export opportunities, securing the climate, environment and biodiversity while safeguarding food production and employment. AgriFoodTure will work fast to create strong, results-oriented research and innovation collaborations that build solutions across relevant fields of specialist expertise. Within agriculture, where plants, animals, soil, water and energy are closely interconnected, AgriFoodTure will apply a circular, holistic approach to create sustainable solutions for Denmark and the world.

#### objective

To drive the sustainable transformation of the Danish agri-food system by delivering on the roadmap.

#### focus area

The AgriFoodTure roadmap has identified five tracks which together will contribute to reaching the 2030 and 2050 goals and visions:

- · A: Land use and management.
- · B: Animal-based food production.
- · C: Plant-based food production.
- D: Biotechnology-based food production and alternative protein sources.
- · D: Crosscutting aspects.

trl

Technology Readiness Level (TRL): TRL 3 to TRL 9.

who can apply

The AgriFoodTure partnership seeks ambitious, cross-cutting research and innovation projects that deliver impact to the AgriFoodTure roadmap. To be considered, a project should consist of partners that are active participants in both the design of project, the realization of the project and the active implementation of the results from the project. Relevant collaborations across businesses, research institutions and public institutions must also be striven for.



vision

The Plant-based Food Grant's vision is that plant-based foods should play a significant role for the benefit of the food industry's development and for the health of both people and the planet.

mission

To contribute to the development of the plant-based food sector. A larger proportion of plant-based foods in production and on our plates should help reduce the climate and environmental impact of Danish agriculture, while also facilitating the transition of food production.

objective

To support initiatives that contribute to a more plant-based diet, both on early development stages and by increasing knowledge and education about plant-based diets.

focus area

#### THREE STRATEGIC DEVELOPMENT AREAS

#### Promotion of demand:

- Increase the proportion of plant-based food in public and private institutional kitchens and food services.
- · Increase private consumption of plant-based foods among Danes.
- · Boost demand for Danish plant-based foods in export markets.

#### Supply promotion:

- •Increase the quantity and quality of plant products entering the market.
- Increase the volume of Danish plant-based food production on land and at sea.

#### Sector bridging:

· Strengthening the entire value chain.

trl

Technology Readiness Level (TRL): TRL 1 to TRL 9.

who can apply

Plant-based Food grants can be allocated to businesses, organizations, and research and knowledge dissemination institutions, among others. At least half of the foundation's funds are used for projects related to organic plant-based foods.



vision

GUDP's vision is a Danish food production that is climate-neutral, considers nature, environment, and animal welfare, while also being profitable and producing healthy, safe, and tasty foods.

#### mission

#### GUDP will realize its vision by supporting innovative and businessoriented projects that:

- Are well-thought-out throughout the value chain, ensuring that the food industry remains competitive in the long run.
- · Develop climate-neutral and environmentally friendly solutions.
- · Reduce food waste for the benefit of society as a whole.
- Address the market/consumers' needs or demand for new climate-friendly and sustainable foods.

#### objective

To support innovative projects that promote green and economically sustainable development throughout the food and non-food sectors, from primary production in agriculture, fisheries, and aquaculture to processing, marketing, and distribution.

trl

**Technology Readiness Level (TRL):** TRL 4 to TRL 8 (sepcial pools are exempted).

specifics

Specific criterias: GUDP projects must have effects on both green and economic parameters. The green goals must be achieved by ensuring a high level of climate, nature, and environmental protection, animal welfare, food safety, and health. In addition, a well-founded business plan for the projects should help ensure that the economic effects are achieved.

#### wno can apply

GUDP grants can be allocated to businesses, organizations, and research and knowledge dissemination institutions, among others.

GUDP provides grants for development, demonstration, research and network projects

#### special allocations in 2024

45 million DKK for a special pool for biosolutions.

15 million DKK for a special pool for climate-friendly foods, food systems, and alternative proteins.

10 million DKK for a special pool for reducing food waste.

**FUNDED PROJECT NAME** 

**ORGANISATION** 

**PITCH PERSON** 

Retox-Pro

Platform | Plant2Food

Department of Molecular Biology and Genetics (AU) **Stig Uggerhøj Andersen** Associate Professor

MiCop

Platform | Plant2Food

Department of Food Science (UCPH FOOD) **Lene Jespersen**Professor

**AQRIFood** 

Platform | AgriFoodTure

Department of Plant and Environmental Sciences (UCPH) Christian Bugge Henriksen
Associate Professor

**HyCheese** 

Platform | AgriFoodTure

Department of Food Science (UCPH FOOD) **Lilia Ahrné** Professor

**FutureDairy** 

Platform | Plant-based Food Grant

Audu – by PlanetDairy **Jakob Skovgaard** Co-Founder & CEO

Figo

Platform | Plant-based Food Grant

Danish Technological Institute **Line Ahm Mielby** Consultant, PhD

Valuekelp

Platform | GUDP

**Royal Greenland** 

**Niels Bøknæs** Business researcher

Tempeh

Platform | GUDP

Nutrition and Health, University College Absalon **Rikke Højer Nielsen** Senior lecturer, PhD

### Retox-Pro

Department of Molecular Biology and Genetics (AU)

RETOX-PRO aims to improve food safety by identifying microbial solutions to remove mycotoxins, potent toxins produced by molds, from food legumes. We will screen a large library of microbes for strains that efficiently remove mycotoxins, and investigate causes of variation in fermentation efficiency across different legume genotypes. The data generated will be used broadly across the plant-based food value chain, serving as a basis for commercial activities in strain development, fermentation method optimization, plant-based food product development, and plant breeding.





pitch 2

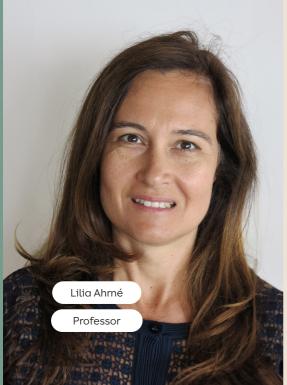
## MiCop

Department of Food Science (UCPH FOOD)

MiCoP aims to establish a knowledge-based paradigm for constructing synergistic microbial communities tailored fermentation of plant-based food. Specifically, we aim to fulfil fundamental knowledge gaps on how microbes can transform Nordic varieties of pulses into delicious and healthy foods. To enable broadness in implementation of research results an AI/ML approach will be used for design of microbial communities.

The project is designed to establish the foundation for developing superior plant-based food products for the future. Focusing on oats, peas, and faba beans, the project aims to enhance the quality and sustainability of raw materials, reducing reliance on generic imported cultivars used mainly for feed. By developing superior raw materials and ingredients specifically tailored for plant-based food production, AQRI-Food seeks to give the Danish food sector companies a competitive edge in the global market, blending nutritional, functional, and sensory quality with sustainability.





## **HyCheese**

Department of Food Science (UCPH FOOD)

HyCheese aims to create technological approaches and know-how to accelerate the development of a new generation of sustainable and affordable hybrid hard cheeses containing 40 to 80% plant proteins. The project is coordinated by UCPH in collaboration with DTU, SDU, Novonesis, Arla Foods, Thise, KMC and FOSS.

pitch 4

## **FutureDairy**

Audu - by PlanetDairy

PlanetDairy is creating a new paradigm for dairy. We're starting with our cheese brand Audu, but the sky is the limit. We're founded in 2022 in Denmark by three former dairy executives. PlanetDairy is fueled by the love of dairy, but we're not bound by tradition. By using novel technologies like precision- and biomass fermentation we find new ways to marry the best part of plants with the craftsmanship of the lovely cheeses that we know and love. The result is radically more sustainable products without compromises on taste and functionality.

supported by plant-based food grant





pitch 6

## Figo

Danish Technological Institute

The FIGO project works towards strengthening the plant-based food sector by involving consumers in the product development phase and by developing consumer-driven innovation methods for the development of plant-based products.

Business researcher

## Valuekelp

**Royal Greenland** 

The Greenlandic company Royal Greenland A/S has started up full-scale commercial testing of seaweed cultivation in Greenland. The new GUDP project VALUEKELP started up in 2023 will support this:

1) Optimization of preservation of seaweed just after harvest in Greenland related to quality, economy and sustainability DTU Food)

2) Developing of new products using seaweed as raw material (Royal Greenland and Nordic Marine Nutrition)

3) Life cycle assessment (Copenha-

gen University)



pitch 8



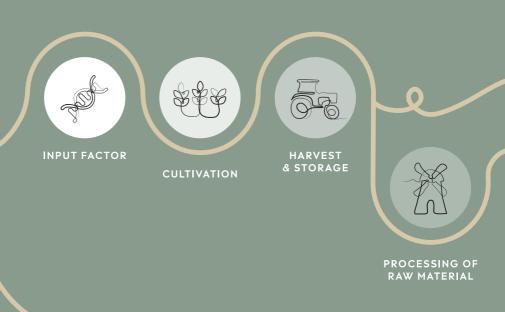
## **Tempeh**

Nutrition and Health, University College Absalon

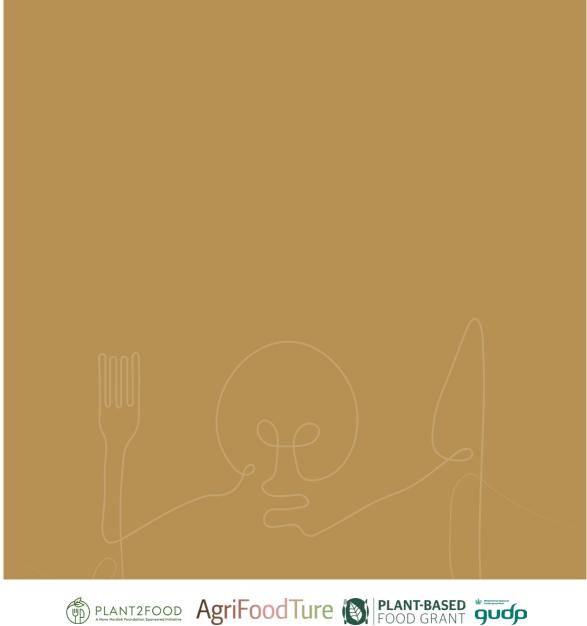
Introducing tempeh into Danish food culture can be part of the solution to eating more healthily and environmentally friendly. The project focuses on enabling an upscaling of tempeh production based on Nordic ingredients, developing and testing new innovative types of tempeh with local ingredients (e.g., seaweed), and introducing tempeh into Danish food culture.

fast forward

# Plant-based value chain













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