

4.12.2024







## **AGENDA**

#### Welcome

#### Basics of EU projects for companies/SMEs:

- Understand the benefits of joining these initiatives, including the timeline, ownership of results, and what's in it for your company.
  - Andrea Danni, VTT
  - Sirja Viitala, LUKE

## Review of most Interesting agri-food funding opportunities for 2025:

- Discover the agri-food calls that VTT and LUKE are prioritizing for the next year.
  - Mirva Lampinen, VTT
  - Hanna-Maija Kallio, LUKE

## Contact information to express your interest to join EU projects

Q&A



The Horizon Europe program is the EU's largest ever investment in research and innovation in Europe with a budget of 100 billion €

## **Horizon Europe – Why to join?**

#### **Invest in your business**

- Get new insight and the latest information on developments and research in your field
- Be the first to benefit from the results obtained in the project
- Obtain EU funds for your RDI activities lowering the risk
- Gain insights on future market and policy developments

### **Networking and public relations**

- Get involved in new networks, new contacts and collaboration with top players in your field
- Get to show your skills on international forums and get references for future growth
- Build a European value chains and engage with future business partners
- Publicity among policy-makers, academia and wider public
- Influencing regulations and standards



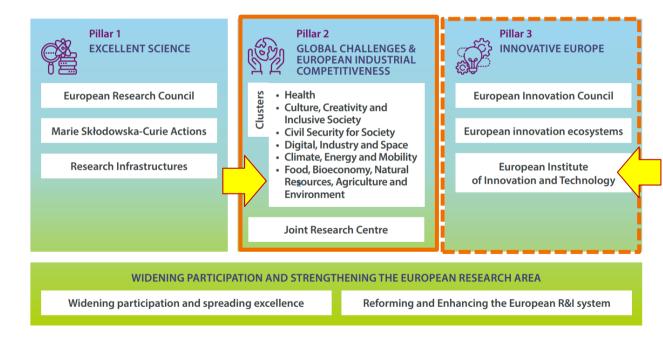


## Food related RDI opportunities

- Food related opportunities in large RIA/IA projects especially in Pillar 2 Cluster 6 Farm2Fork calls
- EIT Food in Pillar III with different type of calls and partnering opportunities

#### Partnerships, e.g.:

- European Partnership for Sustainable Food Systems, co-funded (MMM, BF, RCF)
- Circular Bio-based Europe JU, funding esp. for new ingredient development



## **Horizon Europe grant info**





Typical grant 3-12M€ for 3-4 years projects – more often 5-10M€ in the food calls



Typical funding rates are 100% or 70%, also for large corporations



Consortium composed typically by 7-15 partners from 5-6 different countries



From basic research (TRLs 3-4) to close-to-market innovation (TRLs up to 7-8)



IPR for the developer/creator, no need for disclosure of commercially relevant results



## **Horizon Europe – How to participate?**

- Proposal preparation typically require 5-6 months in which the coordinator is doing most of the work, but inputs are required from all partners.
- VTT is an experienced coordinator and among the top European organization in EU R&D funding with hundreds of granted project in both the ended Horizon 2020 program and ongoing Horizon Europe
- Partners in EU projects are expected to actively contribute to the project actions. Their contribution is agreed in proposal preparation phase and is reflected by their share of the budget.

## How to be involved in the project:

Consortium roles	What does this involve?
Partner (Beneficiary)	Full project member. Funding for public bodies 100% funding + 25% overhead; For profit organisation 70% funding +25% overhead
Associated Partner / 3 <sup>rd</sup> Parties	Choose targeted activities to be part of but need to self-fund (no project budget)
Stakeholder Board member	Attend workshops + co-creation + discuss and follow implementation of activities  Budget – can cover travel costs to workshops, accommodation etc, no salary
Subcontractor	Limited part of the project and must be justified. Tasks may NOT be subcontracted inside the consortium (between Beneficiaries or Affiliated Entities). E.g., Contracts for goods, works or services that are part of the action tasks.
External service provider	Selected task e.g., collecting regional data, sharing existing database access Costs under Purchase costs category on beneficiary/partner budget



#### 6- months to DL Consortium building, NDA

5-2 months to DL Proposal writing kick-off. (Face-to-Face meeting)

- Align your plans with your company strategy (and ecosystem)
- Investigate funding opportunities
- Network and connect
- Allocate time and resources
- Contribute actively already at proposal preparation stage to ensure your level of involvement and build towards future partnerships
- Select coordinator carefully



Grant Agreement (GA) signed with EC

Consortium Agreement (CA) signed with the consortium



## VTT key figures in Horizon Europe (2021-2027) EU's key funding programme for research and innovation

13%

VTT share of all Finnish funding (84,7M€) Largest Finnish beneficiary **17th** 

VTT position in the ranking of all 12 600 Horizon Europe beneficiaries (109 projects) 1100

Number of organizations with which VTT has partnered (more than 500 companies) 38k€

Average EU funding per number of staff, highest among the top 10 European RTOs

Source: Horizon Europe dashboard, June 2023



## Case examples

## **GIANT LEAPS**

VTT

- GIANT LEAPS (2022-2026) aims to accelerate the dietary shift to make the food system more sustainable and healthier, in line with the EU Farm to Fork Strategy.
- 4 years project bringing together 35 partners from 17 countries. 14 of them are companies.
- Project's ambition is to substitute the consumption of traditional animal proteins in the European diets so that 50% of tot protein dietary intake is derived from alternative protein sources, such as plants, microalgae, insects, and microbial proteins by 2030.

#### Methodology

- Co-creation with stakeholders
- Alternative proteins food processing
- Safety by Design
- · Digestibility and health benefits
- Sustainability assessment framework
- Data integration
- Dietary shift optimization







































































# InnoFoodAfrica project - Locally-driven co-development of plant-based value chains towards more sustainable African food system with healthier diets and export potential



13 African partners with local knowledge and on-field expertise



5 EU Partners with forerunning R&D expertise



Multidisciplinary and participatory approach with local actors



4 target East South African



Climate-smart local crops

Consumers and business insights for effective business models





Improved farming practices focused on local crops



Side stream valorisation to bio-plastics

Capacity building for local business actors

Technology toolbox and knowledge sharing



Evaluation for 2 business models per country



2 complementary food-based dietary guidelines per country



Pilot actions in 10 participatory farm trainings in 4 countries



>5 new food ingredients and >7 food products



Pilot production for 2 biobased materials



Trainings for trainers and value chain actors



International Innovation Platform New business models and services for the value chain actors





Empowerment of local actors

Promotion of international cooperation

 18 partners, 13 from Africa. 5 EU and African companies

6.5M€ project

**Approach** 

Methodology

Results

**Impact** 

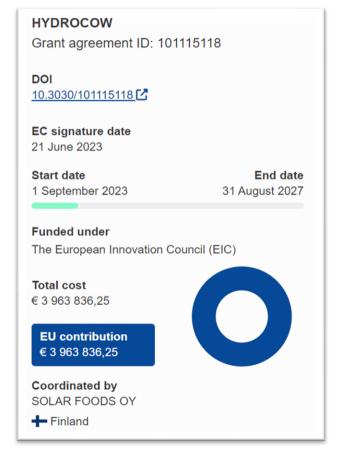






## Solar Foods partners to develop a net-zero carbon dairy production platform in the HYRDOCOW project

- The HYDROCOW project will develop a novel biotechnology platform that opens new ways for sustainable food, materials, medicines, and chemicals production
- 5-entity consortium led by Solar Foods (FI).
  - Other partners: University of Groningen (NL), RWTH Aachen University (DE) and FGen AG (a subsidiary of Ginkgo Bioworks, Inc.; CH)
- The four-year project (2023-2027) has a total budget of 5.5 M€



## **EIT Food Accelerator Network - FAN**



The EIT Food Accelerator Network (FAN) is a Europe-wide acceleration program that allows the most promising startups to further validate their technology and increase their commercial readiness.

The 5 FAN-hubs offer access to leading industry partners and support startups to achieve their goals by technology development in cooperation with universities and research institutes.

Helsinki HUB is an intensive 10-week thematic accelerator program for agricultural and food technology startups. The program focuses on technology validation, business acceleration, while providing visibility and networking.









# Thus far 14 Finnish start-ups participated in the EIT FAN Helsinki Hub in 2020-2023









# **To Horizon Europe** with Luke

Sirja Viitala





## **Luke in Horizon Europe 2021-2027**

- 67 projects
- 13 coordinated
- 2 Co-Funded Partnerships:
   FutureFoodS, AGROECOLOGY
- Thematic priority:

   Food, Bioeconomy, Natural Resources,

   Agriculture and Environment (76%)



**DeliSoil** - Delivering Soil improvers through improved recycling and processing solutions for food industry residues streams, RIA, 7M€, 2023-2027



**CircHive** - Developing & piloting biodiversity footprinting & natural capital accounting via a 'beehive' of sectoral hubs, for sustainable transition to a circular EU bioeconomy, IA, 11,5 M€, 2022-2027



**Digi4Life** - Supporting the potentials of digital, datadriven solutions for livestock tracking, CSA, 5M€, 2024-2028



**Presilience** - Precision climate resilience for agriculture and forestry sectors in the European boreal regions, IA, 10M€, 2024-2028

Food-related Horizon Europe projects coordinated by Luke



## **Converting food processing side streams** Deliscil Converting rood processing into valuable resources for soil

- The project aims to transform food industry byproducts into safe, sustainable, and tailored soil improvers.
- The project addresses two pressing challenges: the poor recycling of industrial food processing byproducts and the degradation of soil health.
- 5 living labs, regional, different source of side streams

- Funding: EU HORIZON 2021-2027 (RIA), MISSIONS: The EU Mission "A Soil Deal for Europe"
- Duration 2023-2027
- Total budget: 7 M €
- Consortium: 14 partners including academia, industry and government from 10 countries
- Companies: Yara, Proman
- Coordinator: Ansa Palojärvi, Luke

More information: <a href="https://delisoil.eu/">https://delisoil.eu/</a>



## Recognising, measuring and reporting CircHive on the value of nature

- The project develops rigorous and standardised methods for combining two approaches to valuing nature: biodiversity footprinting and natural capital accounting.
- By combining these methods, the project will provide a more comprehensive approach to valuing nature and improving biodiversity performance.
- These two approaches are being used by organisations to understand and value the nature that underpins their operations.

- Funding: EU HORIZON 2021-2027 (RIA)
- Duration 2022-2027
- Total budget: 11,5 M €
- Consortium: 15 research and 10 case-study partners
- Companies: Valio, Barilla, Stora Enso, Millwood, Agroderew, Novamont, Lacoste
- Coordinator: Erika Winguist, Luke



More information: <a href="https://www.circhive.eu/">https://www.circhive.eu/</a>



## **VTT** interests



## R&D interests in the food industry include

- Plant based ingredients and food
- Hybrid food design and innovation
- Cellular agriculture
- Toolbox to support production and design (predictive tools, monitoring technologies; data analytics and modelling; food quality and safety)
- Circular economy, packaging, food waste
- Sustainable manufacturing, digital technologies, robotics

## Luke Interests 2025

Hanna Karikallio, Luke





## **Managing Environmental Impacts of Food Production**

- Circular economy and carbon neutral agriculture
- Agroecology
- Food waste and resource efficiency

#### **Sustainable and Diversified Plant Production**

- Alternative protein sources food and feed
- Resilient food crops and healthy soil, breeding technologies

#### Sustainable Animal and Aquaculture Production

- Resource-efficient and sustainable animal production
- Sustainable aquaculture and fisheries

#### **Innovative Farming Systems and Technologies**

- Food production in controlled environments
- Smart and Data-Driven Agriculture (sensors, robotics, digital technologies)
- Digitalisation and systemic change in food value chains





## **CONTACT INFORMATION**

Please find the contact information of the Food 2.0 research partners in this section. Send a message to the contact persons to express your interest to join EU initiatives!

# VTT ANDREA DANNI andrea.danni@vtt.fi MIRVA LAMPINEN mirva.Lampinen@vtt.fi EMILIA NORDLUND

emilia.nordlind@vtt.fi

LUKE SIRJA VIITALA sirja.viitala@luke.fi HANNA-MAIJA KARIKALLIO hanna-maija.karikallio@luke.fi

Valio Food 2.0 VEERA VIRTANEN veera.virtanen@valio.fi





## RESEARCH INSTITUTE CONTACTS

FAST-Lab-tutkimusryhmä (<a href="https://research.tuni.fi/fast/">https://research.tuni.fi/fast/</a>) (Tampereen yliopisto) on kartoittanut EU-kumppaneidensa kanssa Horizon Europe hakuja

#### Yhteyshenkilö:

Anne Korhonen, anne.m.korhonen@tuni.fi

#### FAST-Lab. targeted calls in HE 2025

- HORIZON-CL6-2025-02-FARM2FORK-09: Innovating for on-farm post-harvest operations, storage, and transformation of crops into food and non-food products.
- HORIZON-CL6-2025-02-FARM2FORK-16: Making food systems more resilient to food safety risks through the deployment of technological solutions.
- HORIZON-CL6-2025-03-GOVERNANCE-11: Enhancing sustainability and resilience of agriculture, forestry, and rural development through digital twins.
- HORIZON-CL6-2025-01-CIRCBIO-10: Unleashing the potential and advancing the impact of digitalization/Artificial Intelligence in bio-based value chains.
  - HORIZON-CL6-2025-02-FARM2FORK-10: Exploring the potential of controlled environment agriculture (CEA).
  - HORIZON-CL6-2025-01-CIRCBIO-06: Innovative solutions for the sustainable and circular transformation of SMEs.

Savonia-ammattikorkeakoulu, Ruokajärjestelmä-tutkimusala: Toteutamme koko ruokaketjun hankkeita pellolta pöytään. Yhteyshenkilö: TKI-suunnittelija Heli Tossavainen, heli.tossavainen@savonia.fi

livari Kunttu, johtava tutkijayliopettaja, **Hämeen Ammattikorkeakoulu**. iivari.kunttu@hamk.fi. Meillä on intressiä, osaamisia ja aika vahva hankekanta **ilmastoviisaan ruoan alkutuotannon digitalisaation ja datan hyödyntämisen alueilla.** Tässä tarkemmin alueita, joihin nykyisissä hankkeissamme keskitymme:

- •Maatalousdatan kerääminen (anturointi) ja yhdistäminen erilaisiin täydentäviin datalähteisiin (satelliittidata, dronedata, säädata jne)
- •Datan käsittely ja analysointi sekä sen soveltaminen esimerkiksi ilmastoviisaan maatalouden päätöksenteossa ja suunnittelussa
- •Datan hyödyntämistä, analyysia ja jakamista tukevat (mobiili-)käyttöliittymät
- •Datan hyödyntäminen ilmastoviisaan maatalouden seurannassa ja tukemisessa.



### RESEARCH INSTITUTE CONTACTS

Turun yliopisto, University of Turku, contact: Coordinator, Mia Ahokas mia.ahokas@utu.fi

ProAgria/MKN Itä-Suomi, erilaiset pellolta pöytään (ml elintarvikevienti) -kehittämishankkeet. Viime aikojen teemat A2-maito, pakastekuivaus yms. jaana.puhakka@maajakotitalousnaiset.fi

Photonic Sensors group, UiT **The Arctic University of Norway**. Contact person: Jan Viljanen, jan.viljanen@uit.no. Core competences: Research and development of sensors for atmospheric and aquatic monitoring. Target species include, but are not limited to, CO2, N2O, CH4 and nutrients. More info: <a href="https://site.uit.no/onchipsensing/">https://site.uit.no/onchipsensing/</a>

LAB-ammattikorkeakoulu; Kasvipohjaisten tuotteiden kehityspalvelut; Sivutuotehyödynnys&Kiertotalouden ratkaisut; Kauran ominaisuudet; Tislaus; Aistinvarainen arviointi. Johtava asiantuntija Sami Luste; sami.luste@lab.fi (https://lab.fi/fi/yrityksille/tutkimus-prototypointi-ja-testaus/food-pilot-plant)

Seinäjoen ammattikorkeakoulu, Kestävään ja vastuulliseen ruoantuotantoon liittyvät teemat, toimintamme kattaa koko ruokajärjestelmän. Olemme aktiivisesti mukana useissa meneillään olevissa horisonttihankkeissa ja kv-kumppanuuksissa. Lisätietoa <a href="https://projektit.seamk.fi/kestavat-ruokaratkaisut/">https://projektit.seamk.fi/kestavat-ruokaratkaisut/</a> tai hankesalkkuvastaava <a href="mailto:anu.palomaki@seamk.fi">anu.palomaki@seamk.fi</a>

Professor Tiina Silvasti, University of Jyväskylä, tiina.silvasti@jyu.fi

The Faculty of Mathematics and Science at the University of Jyväskylä has research for example of

- biomass valuable substances
- natural footprint
- radiation safety of food
- fisheries, sustainable fishing and fish farming, environmental impacts of fish farming Contact persons: Business Service Managers Suvi Harsunen <a href="mailto:suvi.k.harsunen@jyu.fi">suvi.k.harsunen@jyu.fi</a> and Anni Taponen anni.taponen@jyu.fi



## RESEARCH INSTITUTE CONTACTS

Foodwestin asiantuntijapalvelut ovat sekä yritysten että tutkimusorganisaatioiden hyödynnettävissä erilaisissa projekteissa (ostopalveluina tai muun yhteistyön kautta).

Foodwest on elintarvikealan toimijoiden ykkösvalinta asiantuntijakumppaniksi kehittämään uutta ja mahdollistamaan heidän liiketoimintansa kasvu niin Suomessa kuin kansainvälisilläkin markkinoilla.

Foodwestin asiantuntijapalvelut voidaan jakaa seuraaviin teema-alueisiin:

- •tuotteiden ja tuoteaihioiden ideointi ja konseptointi (kohdemarkkinoiden benchmarkkaus),
- •kuluttajaymmärrys ja markkinatutkimukset (esim. konseptitutkimukset ja tuotetestit niin kotona kuin kentällä/hallissa tai online-ympäristöissä) niin Suomessa kuin kansainvälisillä markkinoilla,
- •B2C-tuotekehitys ja myös B2B-ingredienttien applikaatiokehitys,
- •tuotetiedot ja ravitsemus,
- ·laatu- ja elintarviketurvallisuus sekä vastuullisuus
- •tuotteiden sopimusvalmistus, pienerätuotanto ja pilot-koeajot.

Foodwestin toiminnan keskiössä on markkina- ja kuluttajalähtöinen tuotekehitys, jossa kuluttajien ja markkinoiden tarpeet pyritään huomioimaan koko kehitysprosessin ajan ja siten parantaa uusien tuotteiden kaupallisen menestyksen todennäköisyyttä.

Yhteyshenkilö: Harri Latva-Mäenpää, Toimitusjohtaja, FT, harri.latva-maenpaa@foodwest.fi

#### Metropolia University of Applied Sciences (campuses in Helsinki & Vantaa), Clean & Sustainable

Solutions: <a href="https://www.metropolia.fi/fi/tutkimus-kehitys-ja-innovaatiot/innovaatiokeskittymat/puhtaat-ja-kestavat-ratkaisut">https://www.metropolia.fi/fi/tutkimus-kehitys-ja-innovaatiot/innovaatiokeskittymat/puhtaat-ja-kestavat-ratkaisut</a> (FIN & EN) (focus e.g. in sustainable food production & development, indoor farming, IOT, circular economy)

Innovation Director

Meria Rehn

merja.rehn@metropolia.fi

+358 50 500 3890

Harri Kokko **University of Eastern Finland**, We are working in the production of berries in plant factory environmet (CEA). The most actions at the moment are focusing production of strawberries and arctic bramble.

University of Eastern Finland: Marjukka Kolehmainen with the expertise of food impact on human health. E-mail: marjukka.kolehmainen@uef.fi



## **COMPANY CONTACTS**

Pekka Ketola, **3DStep**. Teollinen 3D-tulostus (metallit ja muovit). Olemme kiinnostuneita 3D-tulostuksen sovelluksista ja innovaatioista elintarviketeollisuudessa. pekka.ketola@3dstep.f

- Codeo on kiinnostunut kuulemaan tulevista EU-hauista. Codeo Oy on ohjelmistoyritys, jolla on kokemusta tekoälyratkaisujen toteuttamisesta myös bio- ja elintarvikesektoreille.
- Meitä kiinnostaa erityisesti vastuullisten tekoälyratkaisujen toteuttaminen asiakastarpeeseen. Tämä tarkoittaa, että ratkaisut ovat EU:n sääntelyn mukaisia (GDPR, AI Act, jne) sekä teknisesti tehokkaita ja helposti ylläpidettäviä.
- Yhteyshenkilönä toimii Tommi Aho, tommi.aho@codeo.fi, 0445673520

#### GEA equipment for new food and alternative proteins:

Efficient process solutions for alternative new foods, beverages and functional ingredients

**GEA Test centers:** 

GEA Ahaus Test Center - GEA Videos

GEA Ahaus Test Center Process Line Animation - GEA Videos

Search results for test center - GEA Videos

Digia is a software and service company that combines the possibilities of technology and the abilities of people to build a smarter business and society and a sustainable future. Digia provides data integration, processing, analyzing, presenting and reporting services and solutions related to responsibility and sustainability. Digia has high emphasis to automation and AI based solutions in several industry areas. Digia's role is to enable the commercialization of created data by creating a highly usable, secure, and data-agnostic platform that all parties can use. Digia contact. Jouni livari, jouni.iivari@digia.com

EOD.fi, lisäämme veteen happea tai muita kaasuja prosessista riippuen. Validointi tehty kasvihuoneviljelyssä ja nyt aloitamme hapen syötön hyötyasteen nostamisen kalankasvatuksessa. Meitä kiinnostaa niin aerobisten kuin anaerobisten prosessien tehostaminen. Lisää: EOD.fi



### **COMPANY CONTACTS**

3DStep: 3D-tulostuksen sovelluksia ovat mm. prosessien komponentit, varaosat, erityiset suodattimet, uudenlainen tuotemuotoilu, jne. Jutellaan, jos nämä voisivat olla hyödyksi! pekka.ketola@3dstep.fi

Atria on kiinnostunut kuulemaan tulevista EU-hauista.

Meitä kiinnostaa erityisesti vastuullinen ruokajärjestelmä ja sen kehittäminen. Nämä näkökulmat voivat liittyä alkutuotantoon tai teolliseen toimintaan, digitalisuuteen ja sen hyödyntämiseen ruokaketjussa, kuluttajakäyttäytymisen muutoksiin, kestäviin ja ravitseviin ruokavalintoihin. Yhtevshenkilöitä Atrialta ovat

Anu Saranpää anu.saranpää atria.com

Risto Lahti risto.lahti@atria.com

Teija Paavola teija.paavola@atria.com

Aircohol is interested! Algae, CCU, plant protein, circular, etc... simo@aircohol.com

Senson Oy is intrested for collaborations. We are looking new ways to valorize sidestreams and new technologies. <a href="www.senson.fi">www.senson.fi</a> contact : arttu.ruusunen@senson.fi

Into Seinäjoki on Seinäjoen kaupungin omistama yrityskehitysyhtiö (www.intoseinajoki.fi). Tehtävämme on auttaa yrityksiä menestymään liiketoiminnassaan. Edistämme yritysten liiketoimintaa ja alueemme elinvoimaa osallistumalla itse erilaisiin yritystoimintaa edistäviin hankkeisiin, erityinen painopiste on ruokajärjestelmissä. Autamme myös löytämään kumppaneita alueeltamme. Olkaahan mielellään yhteydessä: sanna.kankaanpaa@intoseinajoki.fi



## **FOOD 2.0 ECOSYSTEM - DECEMBER 2024**

AND LINKS TO THE OTHER VETURI COMPANIES

