Keinot entistä toimivampaan tutkimus-yritysyhteistyöhön – tavoitteena yhteiset EU-hankkeet

EUTI/Business Finland ja kansalliset Horisontti-yhteyshenkilöt (NCP) 20.8.2025 Tampere



Means for more effective researchbusiness cooperation – aiming for joint EU projects

EUTI/Business Finland and National Contact Points (NCP)

Tampere 20 August 2025



Means for more effective research-business cooperation – aiming for joint EU projects

20 August 2025

12.00—12.05 Opening by Business Finland EUTI-office

12.05–12.35 Keynote speakers

- Professor Heli Skottman, Tampere University
- Research Director Antti Kolu, Novatron

~12.40–13.20 Panel discussion

- Heli Skottman, TUNI
- Antti Kolu, Novatron
- Jari Ahola, Business Tampere/City of Tampere
- Pia Salokoski, CLIC Innovation
- Veera Virtanen, Valio Food 2.0 (Leading company & ecosystem)

13.20–13.30 Summary by Harri Länsipuro (TAMK) and closing



Our motivation for the event

- Finland's goal to boost the impact of its R&D investments and move towards its 4% R&D intensity target by 2030
 - o demands the implementation of the parliamentary RDI working group's policies, multi-annual plan for RDI funding, RDI Funding Act and government program
- To achieve the 4% R&D spending target (PM):
 - The aim is to increase ambitious R&D activities in companies and research organizations, strengthen R&D expertise and the number of R&D experts, and increase international R&D cooperation.
- Another goal set by the Government:
 - o **Doubling the repatriation of EU RDI funding** with new actors Horizon Europe in focus
- How to encourage companies to utilise public R&D funding, develop their activities, grow and create new business?



Previous reviews in boosting collaboration between research organisations and private sector

EC Policy Support Facility (PSF) review (2025)

Support to Finland on improving R&D collaboration between research organisations and the private sector

- ➤ Broadening the base of firms engaged in R&D and science-business collaboration:
 - Stronger collaboration with public research organisations, to ensure increased access to talent and advanced technologies
 - Use of tailored schemes with low administrative burden to encourage SMEs/ other companies to employ researchers
- > Stronger incentives (universities): prioritise engagement with business and society
 - Need to reward knowledge valorisation & revise academic promotion criteria to interactions with business; better IP frameworks and support for academic entrepreneurship
 - Building bridges through internships, joint projects, and European collaborations can deepen mutual understanding between public and private actors

<u>Tutkimustulosten siirto- ja kaupallistamisehdot</u> - selvityshanke (2024)

> Baseline:

- The results/innovations of research organizations are central, and
- companies that do not yet have R&D activities should be more strongly involved
 - ❖ HOW?
- The goal:
 - Harmonizing practices through good examples
 - Clarifying research commercialization process
 - Practical examples and tools needed



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Moderation: Otto Vainio, Business Finland



Keynotes

Heli Skottman, Tampere University Antti Kolu, Novatron



EU RESEARCH AND INNOVATION PROGRAMM



Means for more effective researchbusiness cooperation – aiming for joint EU projects

Professor Heli Skottman

Faculty of Medicine and Health Technology

Tampere University

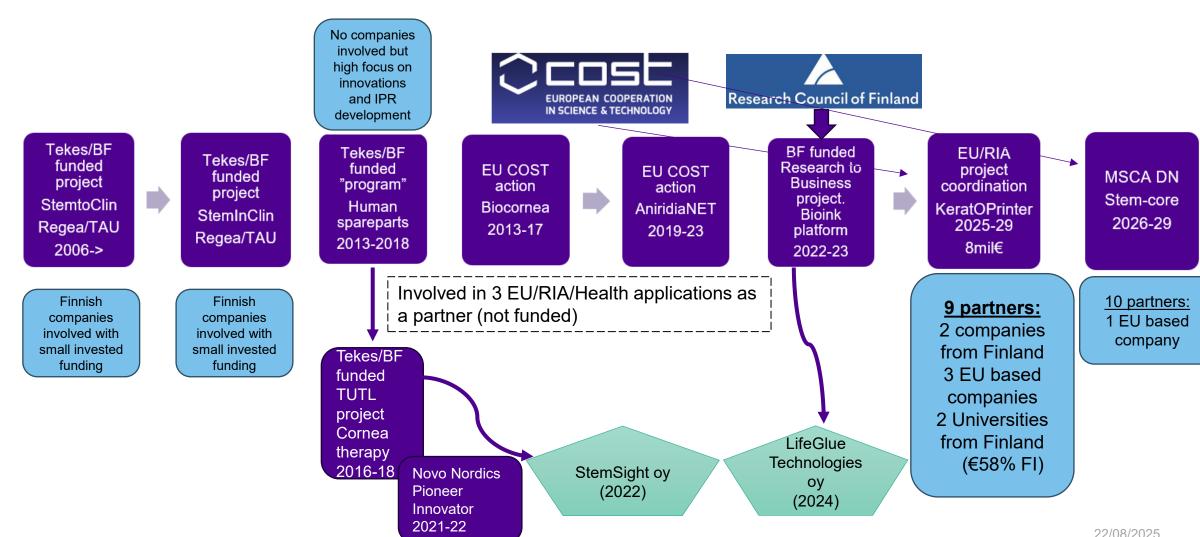


Teaching and research interests/expertise

- Cell technology (professorship and leader of MSc specialization)
- Tissue engineering
- Stem cells and cell therapy development
- Eye diseases



Own background in R&D with industry collaborations (Tampere perspective from 2005 onwards)





Key elements for the successful collaboration between academics and industry:

- Networks, knowledge of some key players in the field (snowball effect...someone knows someone).
 - Confidence and Relationship Building, importance of face-to-face interaction.
- Identification of potential win-win elements, match-making and effective dialog -> Shared goals
- Smooth and fast agreement process e.g NDAs
 - Universities in general very slow with this, many opportunities can be lost if discussions delayed.



Joint interest building and forms of collaboration

Staff exchange and funding instruments

- Sabbaticals or secondments for professors and researchers.
 - Finnish Research Impact Foundation (postdocs, professors)
 - Previously e.g. FiDiPro program/Tekes could be implemented for joint R&D with companies.
 - PoDoCo (Post Docs in Companies) -> joint R&D after secondments?
 - Joint PhDs, not yet fully exploited
- Consulting or advisory roles
- Participation in product development or R&D teams
- From industry: guest lectures or adjunct teaching/supervisory roles



Towards joint R&D



Source: Wong/Information Technology & Innovations, CC BY-SA

Bridging the valley of death from both side

1. R&D pilots and testing (funding instruments)

- Preliminary evidence for joint TRL development (important for grant applications).
- Should be doable "just with one" Finnish company involved. Especially important for high-tech/ specialized fields.
- If company covering the costs, "full cost model with profit margin" is a killer for a SME.
- Administrative bureaucracy should be minimal, e.g. "ready made models".

2. Joint project funding identification

Partnering with other experts and technology providers to build functional consortium.

3. Use of grant writing consultants for EU applications

Support with costs for both academics and companies



Key elements for success from our perspective

- Reputation as a reliable partner is important, Finnish partners doing very well.
- High-quality infrastructure, including laboratory facilities and equipment
 - Making us "attractive partner" for both academics and companies.
- Networks have been under our own effort, international visibility is a must.
 - Rate limiting factor currently the trend to limit travels and no travel budged available e.g. for professors.
 - PI with "extensive travels" -> high track-records with EU applications/funds.
- Previous work with dedicated EU grant consultant efficient project design, consortium building and grant writing.
- Administrative support in project implementation and coordination for EU-funded projects
 - For project coordinator this is crucial



NOVATRON



1991

Founded

Founded by Jukka Tervahauta, current CEO Petri Moisio.



140+

Employees

Driving Innovation with industrychanging products



23M€

Revenue (2024)

90% of business generated by Nordic market.



Technology Center in Pirkkala, Finland

OUR ECOSYSTEM OUR SOLUTION

3D-WIN™

VEKTOR.IO

by NOVATRON





Infra owner



Construction









"Streamline the operations and cut down infrastructure project costs with Novatron's openBIM Workflow"







Novatron® Laser receiver



Novatron® Controller



Display (10" touchscreen)



Display (5" touchscreen)

MC APPLICATIONS



Excavators (& Backhoe Loaders)



Dozers



Wheel Loaders



Surface Drills



Surveyors & Site Managers



Cloud Platform: Xsite® Manage



Desktop solutions: 3D-Win™



Strategic Partnership with Vektor.io

Research projects

- EU level
 - MORE (Marie Curie, Doctoral school)
 - STREAM (Horizon 2020)
 - XSCAVE (Horizon Europe)
 - ENGAGE (Marie Curie, Doctoral school)
- National level
 - SWARM (BF)
 - AI4Machinery (BF)
 - DSII Teollisuuden tohtorikoulu
 - PoDoCo PostDocs in Companies









NOVATRON

Industrial doctoral schools

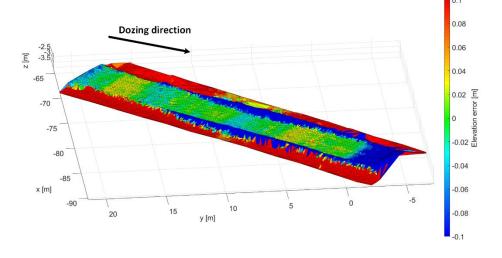


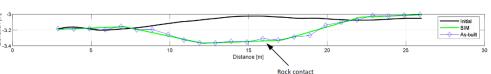
• Good:

- Natural way to get new information into the company as the student will be working directly inside the company.
- Specific challenge that is in companies' interest
- E.g. Bulldozer automation development

• Bad:

- PhD ready after 4-5 years from the start of the project, so lots of things can change during that time
- Good and bad
 - Student has large freedom on where to concentrate







EU projects

Good:

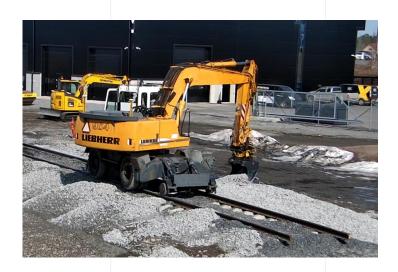
- 100% funding so it is easier to do far reaching research.
- New partners means new ideas
- International projects are also good for international business

• Bad:

- Success rate is not so good (Ours is way above average... 4/11 -> 36%)
- New partners means new ways of working
- Co-operation is not always the best...
- It is almost impossible to plan a project from SME point of few

Notes

- The leading partners need to have experience on EU projects
- Research comes first





BF projects

- Good:
 - Good communication with BF
 - We can get feedback and modify our application if needed.
 - Good communication and understanding on what other partners are doing
- Bad:
 - Starting the project can take quite long time... 1-1.5 years from the start of discussions
 - Using the results of research organization for companies can be challenging
- Notes:
 - Needs direct discussion in application phase between each company and research institute
 - Actual benefits for all partners in the application(business and other benefits)
 - Concrete business plans and expectations for companies



Best practices for research

- The access to the research infrastructure of companies should be as easy as possible
 - Access rights, working places, people
- Personal contacts with research groups are important
 - Speed up the creation of consortiums
- Exchange of information outside of projects
 - You need to have a platform where you meet and discuss research topics and interests with companies and research organizations (e.g. FIMA and SIX events)
- Clear roles in the project
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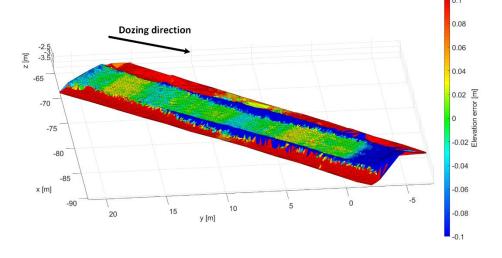


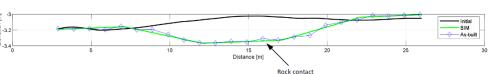
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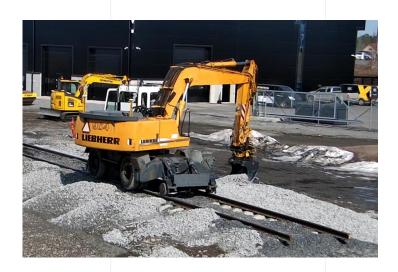
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Panel discussion

Panelists:

Heli Skottman, Tampere University

Antti Kolu, Novatron

Veera Virtanen, Valio (Food 2.0 Veturi)

Jari Ahola, Business Tampere

Pia Salokoski, CLIC Innovation

Moderator: Otto Vainio, NCP (Digital), Business Finland



EU RESEARCH AND INNOVATION PROGRAMME

Panel discussion

Question 1: Introduce yourself and your organization!

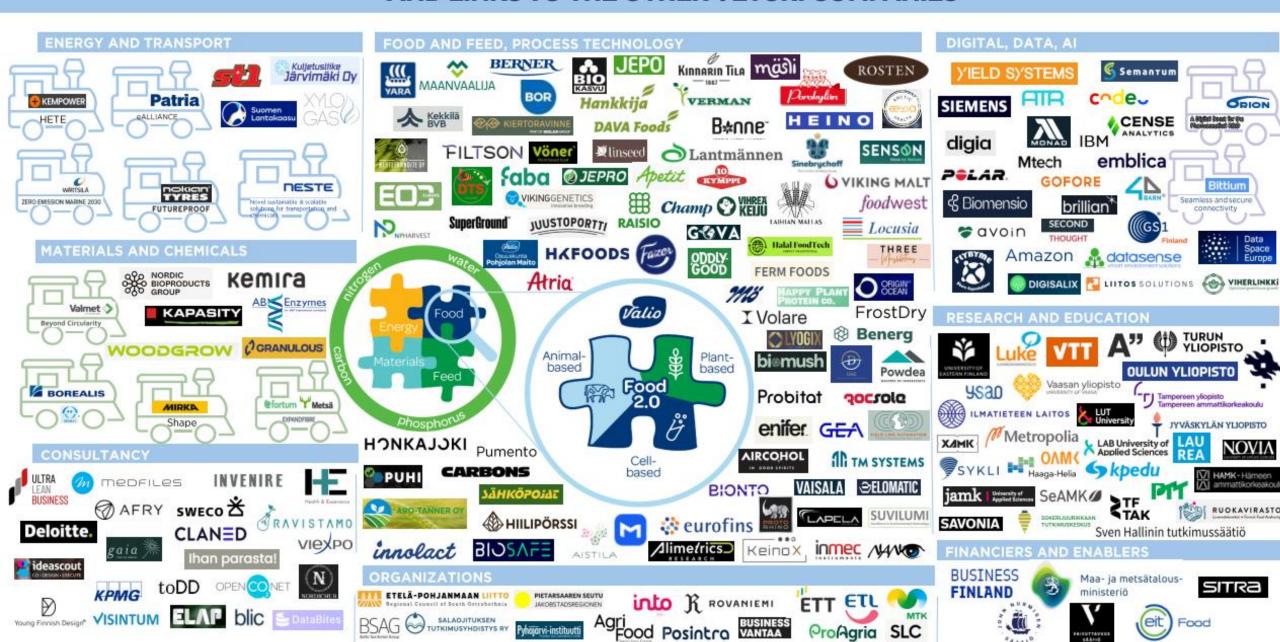
Veera Virtanen, Valio (Food 2.0 Veturi)
Jari Ahola, Business Tampere
Pia Salokoski, CLIC Innovation





FOOD 2.0 ECOSYSTEM - AUGUST 2025 192 MEMBERS

AND LINKS TO THE OTHER VETURI COMPANIES





TAMPERE.

- EU -rahoitukseen liittyvä alueen yritysten neuvonta (Business Tampere 2022->)
- EU-hankeportfolion management, EU -hankekoordinaatio & valmistelu (VTT 2000-2012, 2017-2021)
- Head of Unit (EIT, Budapest 2012-2016)
- TkL (1997), DI (1990) TTKK



BUSINESS TAMPERE Senior Business Advisor, EU Funding Jari.ahola@businesstampere.com

Puh. +358 40 505 2230



CLIC Innovation services for EU projects

Facilitating sustainable growt



CLIC Innovation - SME – non profit – open innovation cluster

We pick & mix

We create additional value to
our partners by building,
coordinating and managing
R&D&I collaboration We work
with cross-sectoral challenges in
order to create new
partnerships. We operate across
different industrial sectors like
energy, bioeconomy and circular
economy

We transform

We are experts in open innovation facilitation and boosting communication, dissemination, exploitation and impact for RDI activities. We drive the transition with our open innovation ecosystems, projects and tools with Penta helix approach.

We CLIC

We are owned by leading international companies and Finnish research organizations committed to create sustainable solutions for the world.

We contribute to developing a more favourable innovation environment in Finland and EU.

CLIC Stakeholders and partners



































































































Our services for EU funded projects

Project preparation and writing

Coordination

Communication & dissemination

Exploitation & commercialization support and impact creation services

Stakeholder engagement, ecosystem facilitation/co-creation, value chain building, network/industry representation

Research services related to our themes, operational environment reviews

CLIC's ongoing EU projects and projects under preparation

Energy

Ongoing EU priojects:

- Baltic Sea H₂ Valley: IA, Flagship, building hydrogen valley around the Baltic Sea
- REMHub, Rare earth and magnets hub for a resilient Europe, IA, Flagship
- **HyTruck**, Interreg project, Hydrogen road transport
- 3 projects under preparation for 2025 calls and 4 for the 2026 calls CLIC is coordinator in 6 of them

Bioeconomy

Ongoing EU projects:

- Engage4Bio: HE CSA
 Improving understanding of and
 engagement in bio-based systems
 with training and skills
 development
- **SuperBark** CBE RIA Safe, sustainable and high-performance adhesives and coatings
- Value4Pack: HE CSA Bridging investment opportunities to achieve a resilient European food packaging value chain,
- **PROTEUS**: CBE IA Flagship Valorisation of aquatic biomass waste and residues
- 3 projects under preparation For 2025 calls

Circular economy

• 4 EU-projects under preparation for 2025 calls, in two of them CLIC is a coordinator

Question 2

One observation in the Policy Support Facility's country report was that advancing the impact of Finnish R&D cooperation is hindered by the *siloing of information and expertise and barriers to their transfer*.

Have you identified such a challenge in your own operating environment, and have you found ways to avoid silos and promote transfer of information?



Question 3

Given in the title of this workshop 'aiming for joint EU projects', the shared objective of the Finnish Government we all contribute to is double Finland's Horizon yield.

How can Finnish research institutions and companies best join winning EU consortia and maximize Finland's yield in EU projects, both in numbers and qualitatively?



Question 4

Now it's your turn!

Raise your hand to get a mic, present yourself and ask a burning question to (any or all of) our panelists



Wrap-up



EU PSF 06/2025: Barriers to cooperation

First of all => Finland has a well-functioning R&I system

Business-side challenges

- Limited number of firms especially SMEs engaged in R&I.
 - Private sector base for collaboration with research is too narrow.
 - SMEs face barriers such as a complex innovation support system and weak incentives.
- Finland, like other EU countries, is caught in the "middle technology trap."
- Insufficient domestic capital for scaling up
 - ⇒ Risks of foreign ownership and relocation.

 Retention of growth firms requires embedding them in the Finnish ecosystem.
- Public support for business R&D is well below the EU average and should be increased.

Middle technology trap

- Companies are competitive in mid-level technologies
- They struggle to break into the global frontier of advanced, high-growth technologies.
 - ⇔ Growth stalls

Too advanced to compete on low costs, not innovative enough to lead in top markets.

Firms may get stuck in incremental innovation limiting scale-up potential and international competitiveness.

EU PSF 06/2025: Barriers to cooperation (continued)

Universities and Universities of Applied Sciences play a key role, however, they face systemic and institutional hurdles in engaging with business.

Challenges include:

- <u>Different expectations</u> on timelines, deliverables, IP and confidentiality.
- Lack of institutional and personal incentives.
- Insufficient support services for business cooperation.
- Weak mutual understanding of needs between sectors.
- Cultural barriers, with <u>limited priority given to business engagement</u> in university missions and careers.
- Difficulty in recruiting sufficient R&D talent.
- <u>Limited mobility of R&D staff between academia and business</u>.

Thank you for your participation and your input!

Keskitetyt Horisontti Eurooppa -palvelut: horisonttieurooppa.fi

Kysymykset/ Inquiries: euti@businessfinland.fi

