

# HEROES

Higher Education for Resilience-Oriented and  
Empowered Societies



Knowledge is power.  
Resilience and innovation are superpowers.



Co-funded by  
the European Union



# Presentation of the HEROES project

## WP5 – Joint practice-oriented scientific research hub

Presenter: doc. Ing. Pavlína Adam, Ph.D.

Date: 16.4.2025



Knowledge is power.  
Resilience and innovation are superpowers.

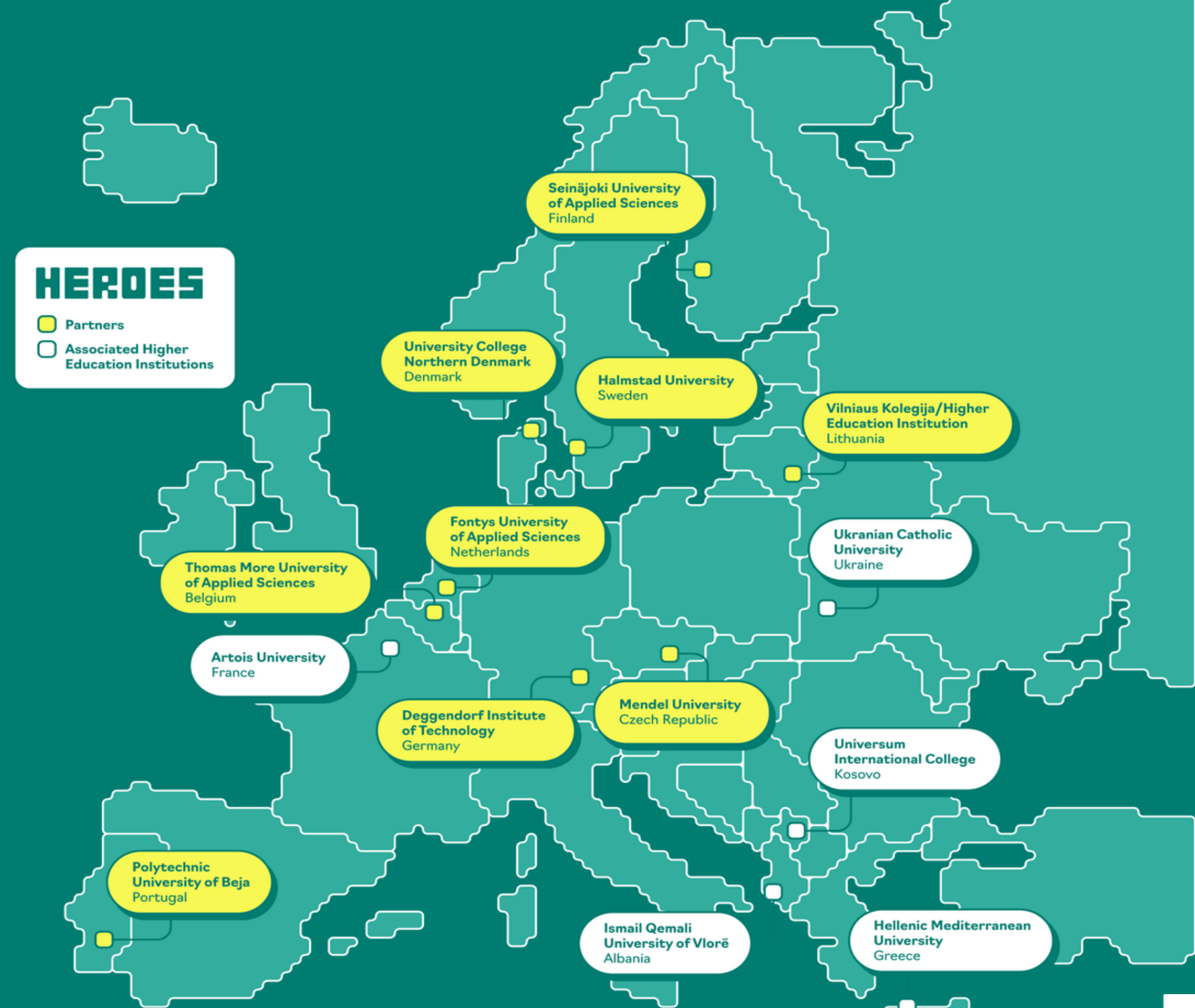


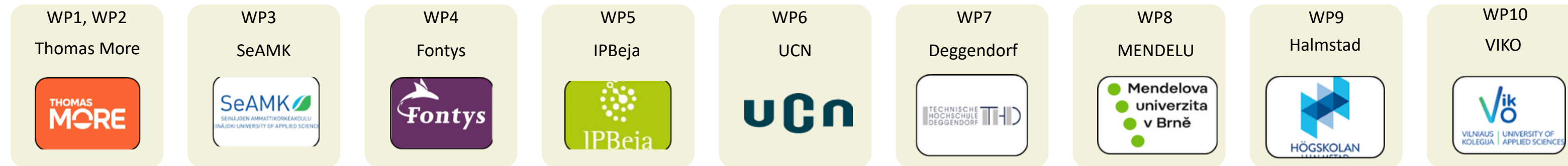
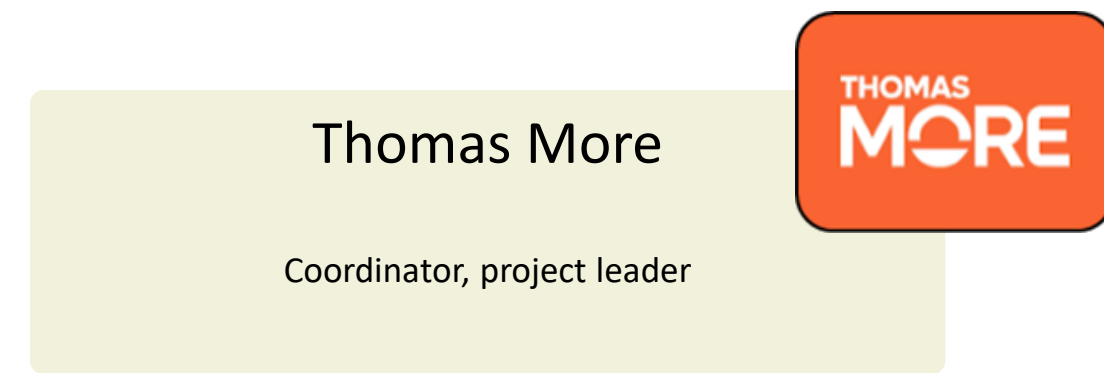
# 9 Universities Involved

- Thomas More University of Applied Sciences (Belgium)
- Deggendorf Institute of Technology (Germany)
- Polytechnic University of Beja (Portugal)
- **Mendel University in Brno (Czech Republic)**
- Fontys University of Applied Sciences (Netherlands)
- University College of Northern Denmark (Denmark)
- Seinajoki University of Applied Sciences (Finland)
- Halmstad University (Sweden)
- Vilnius Kolegija (Lithuania)

## 5 Associated partners

- Artois University (France)
- Isamil Qemali University of Vlore (Albania)
- Hellenic Mediterranean University (Greece)
- Universum International College (Kosovo)
- Ukranian Catholic University (Ukraine)





WP Lead



WP Lead



WP Lead



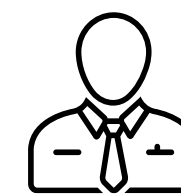
WP Lead



WP Lead



WP Lead



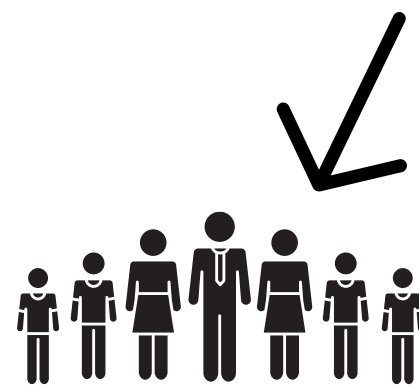
WP Lead



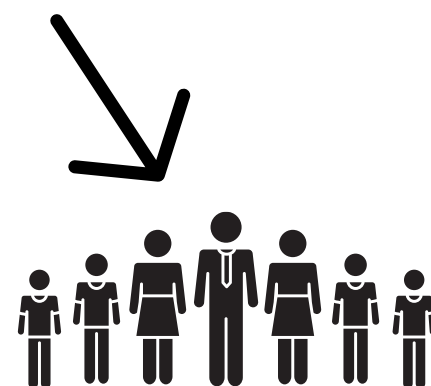
WP Lead



WP Lead



Work team



Work team

- Each partner is a leader of 1 WP (Thomas More leads 2 WP)
- WP Lead (from leading institution) leads **work team** of **WP managers** from all participating institutions
- Each WP manager acts on behalf of their institution and can lead other work Teams on site



# **WP5 *Joint practice-oriented scientific research hub***

## **(EDUCATION4REGIONS)**

**Leading University: The Polytechnic Institute of Beja**



# The Goal



To strengthen joint, practice-oriented scientific research capabilities

- Partners collaborate to establish the ,HEROES4REGIONS‘ joint research hub, organised in an agile pod structure
- This arrangement empowers knowledge and innovation-creating teams to engage in collaborative, challenge-based research and Innovation projects aimed at advancing smart regional resilience

## The level of collaboration follows a step-by-step approach

- Initial creation of flexible pod network and (inter)disciplinary matchmaking
- Sharing of facilities and support services
- Collaboration in new research, development, Innovation or knowledge transfer



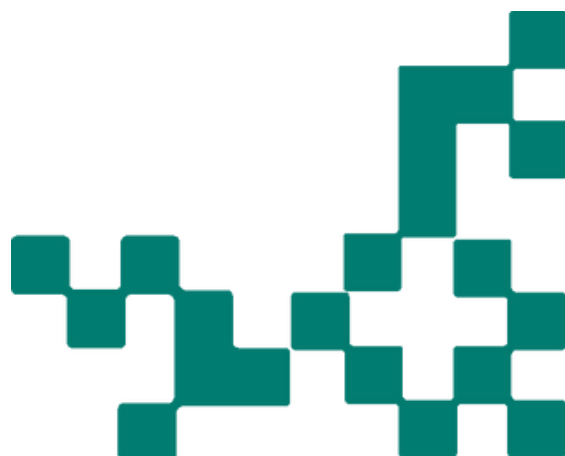
# SPECIFIC OBJECTIVES

- **T5.1 ESTABLISH INTERINSTITUTIONAL RESEARCH NETWORKS (PODS)  
(M01-M48)**
- **T5.2 ACTION PLAN FOR THE SHARING OF RESEARCH FACILITIES AND  
SELECTED SUPPORT SERVICES (M01-M48)**
- **T5.3 JOINT PROTOCOL FOR CHALLENGE-BASED INNOVATION(M10-  
M48)**
- **T5.4 SELECTION AND PILOTING SMALL-SCALE COOPERATION  
PROJECTS(M09-M48)**



# T5.1 ESTABLISH INTERINSTITUTIONAL RESEARCH NETWORKS(M01-M48)

- The partners create interinstitutional research networks (pods), **within key areas** that reflect the strengths of the partners and impact the resilience of people, business and nature
  - **Agriculture and food (MEN lead)**
  - Care and wellbeing
  - **Circular economy (MEN)**
  - **Digital transformation (MEN)**
  - Education, learning & inclusion
  - **Regional development (MEN)**





# Agriculture and food

- This pod assembles expert networks in sustainable agri-food systems, business management and economics in agri-food, nutrition, food safety, agrisciences, horticulture, agriculture and forestry

- POD FACILITATOR CONTACT:

**Ing. Jakub Pečenka, Ph.D.**

**[Jakub.pecenka@mendelu.cz](mailto:Jakub.pecenka@mendelu.cz)**



# Circular economy

- This pod creates expert networks in circular business models, sustainable entrepreneurship, circularity of (building) materials, resource wisdom and resource efficiency
- This POD is facilitated by **Seinäjoki University of Applied Sciences - SeAMK**
- MENDELU CONTACT:

**Doc. PhDr. Martina Rašticová, Ph.D.**

**[martina.rasticova@mendelu.cz](mailto:martina.rasticova@mendelu.cz)**



# Digital transformation

- This transversal pod assembles experts in extended reality, applied artificial intelligence, embedded systems, middleware, 3D scanning, high-performance computing, spatial computing, modeling and printing, data science, digital twins, robotics, intelligent mobility and (industrial) IoT, digital ethics, usability engineering
- This POD is facilitated by **Deggendorf Institute of Technology**

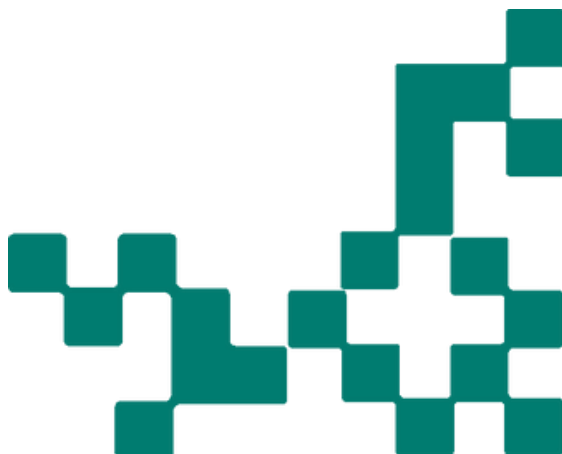


# Regional development

- This transversal POD creates expert networks in business/Innovation ecosystems, innovative tourism, rural development and smart cities and communities
- This POD is facilitated by **Halmstad University**
- MENDELU CONTACT:

**Ing. Jiří Schneider, Ph.D.**

**[jiri.schneider@mendelu.cz](mailto:jiri.schneider@mendelu.cz)**



# T5.1 ESTABLISH INTERINSTITUTIONAL RESEARCH NETWORKS(M01-M48)

- Pod facilitators organise a series of activities with the purpose of strengthening the network and collaboratively develop a challenge-based agenda. The following activities are included:
  - online and physical meetings
  - peer-to-peer workshops
  - Brainstorming retreats
  - Strategic research agenda feedback sessions with local stakeholders



- **Anticipated results:**

- An overview of the pod structure
- For each pod, a collective research agenda with a funding strategy



# T5.2 ACTION PLAN- for the sharing of research facilities and selected support services (M01-M48)



- **Sharing of research facilities and support services(M01-M12)**

An overview of available educational and research infrastructure facilities → a protocol for opening up infrastructure and facilities

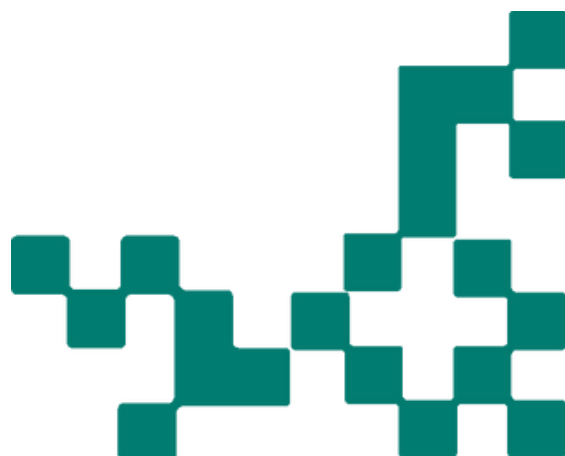
- **Pooled resources for grant acquisition (M06-M46)**

An overview of all staff involved in EU funding advice or proposal writing support→ funding strategy and pathway aligned with the common research agenda on smart regional resilience→ meetings to share good practices in project management and reporting → list of regional funding programme representatives, meetings with them to present the Alliance for brokering



# T5.2 ACTION PLAN- for the sharing of research facilities and selected support services (M01-M48)

- **Shared capacity in ,open science‘ for applied sciences (MEN M25-M36)**
  - Internal workshops to deepen insights on open science for practice oriented scientific research(M25, M27, M29, M33, M34)
  - An exploratory note outlining an approach for ,open applied science‘ (M36)
  - A common webinar information session on the EU Open Science Policy, a web FAIR data and services and current evolutions in the field(M36)
- **Career development in practice-oriented scientific research(M37-M48)**
  - Roundtable discussion on research career development, to share good practices





## T5.3 DEVELOP A JOINT PROTOCOL FOR CHALLENGE-BASED INNOVATION (M10-M48)

- Working group develops **HEROES4REGIONS** challenge-based Innovation program aiming to enhance one-to-one knowledge and technology transfer, addressing specific challenges faced by local businesses, organisations, and communities in terms of smart regional resilience, with a distinct transnational focus



# T5.3 DEVELOP A JOINT PROTOCOL FOR CHALLENGE-BASED INNOVATION (M10-M48)

- The program unfolds in 2 phases:

## ➤ *Preparatory (M10-M24)*

Stakeholder engagement, mapping of existing tools and services, **Creating a framework and protocol that facilitates the efficient screening and allocation of challenges to research pods** and knowledge-creating Teams across the HEROES regions

## ➤ *Implementation (M25-M48)*

Applying the framework, collaboration solution development, the programme also aligns with the needs of the local ecosystem and harnesses the potential of **transnational collaboration**



## T5.4 SELECT AND PILOT SMALL-SCALE COOPERATION PROJECTS (M09-M48)



- The partners elaborate a **lean and light procedure** to enhance collaboration between HEROES partners in research and Innovation in the thematic priority areas
- Interinstitutional research teams can apply for **support** in order to develop a **small-scale collaboration** with the potential for expansion afterwards
- Research/Innovation activities per se are excluded, the support focuses on the **framework conditions for enhanced cooperation**



# DELIVERABLES

- **D5.1 AN OVERVIEW** of partners' research management staff involved in interinstitutional research pods **M5 (May 2025)**
- **D5.2 A COMMON STRATEGY AGENDA** developed by the interinstitutional research pods aligned with smart regional resilience and including a strategy and pathway for funding **M23**



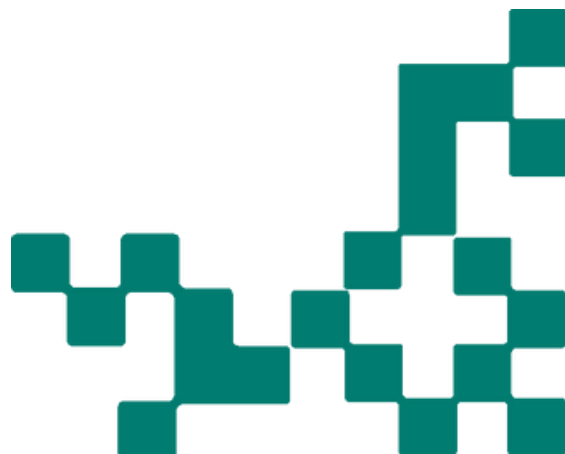
# DELIVERABLES

- **D5.3 AN UPDATED OVERVIEW** of partners' research management staff involved in interinstitutional research pods **M36**
- **D5.4 FINAL REPORT** with a detailed overview of the joint activities of the practice-oriented scientific research hub, including a portfolio of piloted joint cooperation development projects for practice-oriented scientific research and market uptake and other collaboration **M48**



# MILESTONES

- **MILESTONE 14** First call small-scale collaboration projects launched **M15**
  - **Description:** The first call has been launched for the submission of application for small-scale collaboration projects
  - **Means of Verification:** Communication of the procedure and the selection criteria for participants
- **MILESTONE 15** A protocol for challenge-based Innovation is available for implementation **M25**
  - **Description:** Research pods effectively align local challenges with their own research capabilities and with institutional business development services, thereby fostering transnational collaboration
  - **Means of Verification:** Local challenges, whether they involve research questions or innovation needs, are efficiently directed to the appropriate knowledge-creating teams



# CLOSEST DEADLINES

- **17/4/2025**

- LIST of people for each partner's research management staff– name of each member of the staff, a short description of the functions and responsibilities within the partner institution, the relation of each member of the staff to each POD, email, if available ORCID
- An overview of research management staff connecting – the list of people, the relation with the PODs, the role in the structure of the organization

- **8/5/2025**

- Overview of the overall institution scientific research structure (including the hierarchical division and organigram
- Names and contacts of people in charge of each part of the research structure



# Thank you for your attention

doc.Ing. Pavlína Adam, Ph.D.  
pavlina.adam@mendelu.cz

Ing. Petra Coufalová  
petra.coufalova@mendelu.cz

