



EU-CONEXUS Research For Society

D5.3

“Report on best practices and recommendations on mainstreaming entrepreneurial mind-set of researchers”

© 2023

You may copy the content of this paper by crediting EU-CONEXUS RFS as the source of the material

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission and the Agency cannot be held responsible for any use which may be made of the information contained therein.

Deliverable number: D5.3

Lead beneficiary: LRUniv

Type: Public



EU **CONEXUS**
Research for Society



This project has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 101017436

Document Information:

Grant Agreement Number: 101017436

Project Acronym: EU CONEXUS RFS

Work Package: 5

Outcome Number: D5.3

Version: 5

Due Date: 31/08/2023 (M30)

Delivery Date: 26/06/2023 (M28)

Dissemination Level: Public

Task leader: LRUniv

Participating partners: All

Authors: Michael Gouin, Johanna Maillot, Aurélia Kuga, Viktorija Vaitkeviciene

Internal Reviewers: WP5 members, EU-CONEXUS Executive Director, RFS Project manager, Research Council members

External Reviewers: _____

Keywords: Researcher; entrepreneurship; innovation; mindset; best practices

HISTORY OF CHANGES				
Version	Date	Status	Partner university	Changes
1.0	06/06/2023	Draft	LRUniv	Created
2.0	08/06/2023	Draft	KU	Updated after review
3.0	13/06/2023	Draft	LRUniv	Updated after review
4.0	20/06/2023	Draft	LRUniv	Updated after review
5.0	26/06/2023	Final	LRUniv	Updated after review

QUALITY CHECK			
Version Reviewed	Date	Reviewer (Partner)	Description
2.0	08/06/2023	KU	Quality check
4.0	20/06/2023	LRUniv	Quality check



Content

Preamble	3
Introduction	5
Research and entrepreneurship	6
1) Defining the entrepreneurial mindset	6
2) Why is it useful to link academic research to the socio-economic world?	7
3) EU-CONEXUS partners good practices	10
Lessons learnt from activities conducted during the RFS project	12
1) Hackathon	12
2) Interview of researchers	14
3) Grass-root networking events	16
Recommendations	29
Conclusion	31
References	32
Appendices	33
Annex 1: Strategic directions on innovation and entrepreneurship at some partners	33
Annex 2: Interview questions	38

Preamble

This report entitled ***Report on best practices and recommendations on mainstreaming the entrepreneurial mindset of researchers*** is part of the ongoing work of the EU-CONEXUS-RESEARCH FOR SOCIETY project funded by the European Commission to support higher education institutions in Europe and their institutional transformation.

EU-CONEXUS-RESEARCH FOR SOCIETY (RFS) is a 3-year project aiming at the strengthening, modernisation and internationalisation of the Research & Innovation dimension of the European University for Smart Urban Coastal Sustainability EU-CONEXUS and the corresponding institutional transformation of the 6 RFS project partner institutions: La Rochelle Université (LRUniv), Agricultural University of Athens (AUA), Technical University of Civil Engineering Bucharest (UTCB), Klaipeda University (KU), Catholic University of Valencia (UCV) and University of Zadar (UNIZD).

One of the project objectives is to develop a joint science and innovation agenda, which involves in **Work Package 5 Knowledge Transfer & Innovation** the development of a common Innovation Management strategy in order to create a performing knowledge transfer network, encourage cooperation with local innovation ecosystems specialised in Smart Urban Coastal Sustainability themes and establish an entrepreneurial mindset within the EU-CONEXUS Alliance researchers' community.

This report aims to present a snapshot of EU-CONEXUS researchers' knowledge about entrepreneurship, in order to give recommendations how to foster changes within the academic community capacity to enter the innovation ecosystem and to increase the co-creation and commercialisation of new products and services resulting from academic research work. To do so, we have implemented various actions aimed at understanding the attitudes and perceptions of researchers towards this topic. In particular, we conducted surveys among a representative sample of researchers, organised networking events with field experts and carried out an analysis during a hackathon organized in the course of the project.

The report presents the results of these different actions and will provide elements for reflection on the motivations and obstacles for launching and promoting research results on the business market. We hope that this report will be useful to policy makers, researchers and all stakeholders interested in the development of links between entrepreneurship and research.

These actions are in line with the European Commission's ambitions to invest massively in Research and Innovation for the Europe Union to be competitive globally, and to improve the daily lives of its member states' citizens by responding to societal and environmental challenges.

This document has been elaborated jointly by Work Package 5 contributors from the 6 EU-CONEXUS-RFS partner universities.



The meetings to prepare and write this document took place at the following dates:

- 30 April 2021
- 7 December 2021
- 10 March 2022
- 11 April 2022
- 13 October 2022
- 9 December 2022
- 30 January 2023
- 3 May 2023
- 11 May 2023

Introduction

There is a great disparity and no single view among researchers on the question of entrepreneurship. Indeed, opinions greatly differ according to age, research field and local partners who can help them value their research.

The European Commission's definition of entrepreneurship is the following: "Entrepreneurship means acting upon opportunities and ideas and transforming them into value for others, which can be financial, cultural, or social".¹

The universities in the Alliance currently do not have a joint strategy for developing this subject, which is why this report will highlight the good practices of each partner in an attempt to develop common tools such as training, seminars on entrepreneurial tools and events, such as hackathons, to meet and challenge our European peers.

Tools to enhance the value of research work, such as the Innovation Hub showcase or a website bringing together contacts to facilitate exchanges between laboratories and the socio-economic world, are currently being developed.

This approach is part of a strategy aiming to valorise research and to promote entrepreneurship within the universities of the Alliance. By pooling good practices observed among the partners, we hope to contribute to the emergence of a common strategy to promote entrepreneurship within the Alliance.

The objective of this report is to analyse the entrepreneurial potential of the researchers in the Alliance in order to:

- Get a better understanding of the entrepreneurial culture of the Alliance researchers
- Assess the needs of researchers with regard to the entrepreneurship world
- Stimulate an innovation dynamic that contributes to the development of relations with the socio-economic world
- Enable the emergence, implementation and valorisation of innovation projects.
- Propose tools and services and develop actions for innovation in order to be competitive on global markets
- Define standardised tools and methods within the Alliance for raising awareness and supporting researchers

¹ European Commission https://single-market-economy.ec.europa.eu/smes/supporting-entrepreneurship_en

Research and entrepreneurship

1) Defining the entrepreneurial mindset

Entrepreneurship is a dynamic and constantly evolving subject within the researcher's community. Understanding the factors that motivate or hinder researchers to become involved in this field is therefore crucial for the development of innovation.

Entrepreneurship is a way of thinking and acting that encourages individuals to be proactive, creative and to take initiatives in research valorisation processes by developing commercial and social businesses. It involves being curious, innovative, persistent, and able to take calculated risks to achieve one's goals.

These skills include creativity, problem solving, decision making, the ability to communicate effectively, critical thinking, time and resource management, and the ability to collaborate with others. Developing these skills can help researchers to become more self-reliant, confident and resilient, which can help them to succeed in their research and the valorisation of their research.

Acquiring entrepreneurial skills does not necessarily mean that one has to become an entrepreneur. Rather, it means developing a set of soft skills and attitudes that are useful in many situations, whether starting a business or working in collaboration with a company.

In our case, it is important to transmit the entrepreneurial spirit to a community of researchers for four reasons:

1. Foster innovation

Researchers are experts in their field of research and are well positioned to identify opportunities of innovation and value creation. Encouraging an entrepreneurial spirit among researchers can help develop their creativity and capacity for innovative thinking, which can stimulate innovation in their field of research.

2. Turn research results into practical solutions

Research results can have a significant impact on society, but they often need to be translated into practical solutions to be used. Entrepreneurship-minded researchers may be more inclined to look for ways to turn their research work into useful products or services for society.

3. Enhance researchers' employability

Entrepreneurial skills are highly valued in the labour market, both in the private and public sectors. Encouraging researchers to develop their entrepreneurial spirit can help them acquire valuable skills that can make them more employable in different sectors.

4. Stimulate collaboration

Entrepreneurship also encourages collaboration and communication between individuals. Fostering collaboration and communication between researchers can increase opportunities of discovering synergies, generating new ideas and can support interdisciplinary projects.

2) Why is it useful to link academic research to the socio-economic world?

Researchers have access to advanced knowledge and technologies that can be useful for starting a business. By taking an interest in entrepreneurship, they can learn how to transfer their knowledge into the business world and help develop innovative companies which often create new jobs in areas such as technology, science and engineering.

Innovative companies can have a significant impact on society by solving societal challenges such as climate change, health and social inequalities. Researchers can help them identify opportunities in these areas and contribute to solving societal challenges through innovative approaches, which in turn can be sources of funding for research.

When addressing the topic of entrepreneurial mindset of researchers, a difference should be made between two cases where researchers show an interest and capacity to work with the business world: while some researchers choose to create their company to transfer their research to society, others prefer to collaborate with companies, through research contracts, agreements and potential spin-off creation.

It is important to consider these two frameworks, as they may serve the same purpose of Innovation and Knowledge & Technology Transfer from academic researchers.

a) Academic researchers collaborating with companies

Advantages:

- Inter-sectorial and inter-disciplinary collaboration: by working with socio-economic actors, researchers can collaborate with external experts and gain new skills and expertise complementary to their theoretical knowledge. It is also an opportunity to develop their professional network with new potential partners and investors. Working on complex research projects involving external stakeholders can also encourage multi- or inter-disciplinary collaboration between researchers in order to have a broader and richer perspective to address the subject.
- Research relevance: help researchers to better understand the needs of industry and society and to orientate their research accordingly to make it relevant and useful to society.



- Knowledge and technology transfer: Working with companies and other organisations can help researchers transfer their research results into a marketable product or service (Knowledge and Technology Transfer) and therefore have a societal impact by contributing to innovation stimulation and economic development.
- Research valorisation: By working with socio-economic actors, researchers can also be encouraged to valorise their research by demonstrating its impact on society and increasing its visibility to a wider audience.
- Access to material and financial resources: companies can provide samples, data, equipment or facilities which may be needed to conduct research. They can also fund research by providing grants, scholarships, research contracts or sponsoring research projects in areas that meet their needs. This can help researchers fund more expensive or complex research projects, or gain access to state-of-the-art equipment or technology.
- Some spin-offs (companies set up by a university for the purpose of exploiting knowledge developed there through commercial activities involving university teachers, researchers or students) are created to commercialize already protected (patented) intellectual property. In that case, the patent maintenance costs are carried out by the university.

Disadvantages:

- Companies may exercise a certain level of control over the research conducted due to the commercial interests involved, which may limit the independence of the academic researcher in conducting their research or publishing their results. Researchers should remain vigilant to maintain their independence and respect scientific integrity standards, to ensure that their research results are transparent and unbiased, regardless of the company's interests. In addition, researchers must respect the rules and ethical standards that apply to collaborative research with the industry.
- Companies tight deadlines can lead to pressure for quick results with a risk of hampering the research quality.

b) Academic researchers starting a business

Advantages:

- When creating their own start-up (for developing an innovative business), researchers can have full control over the research and commercial projects they undertake while pursuing work in an area that they are passionate about and finding innovative solutions to problems.
- Flexibility in managing time and resources to conduct projects.
- Research relevance: being fully involved into the entrepreneurial world means that researchers need to orientate their product or service to make it relevant and useful to societal needs.
- Research valorisation and popularisation: when running their own business, researchers must valorise their research by demonstrating its impact on society and increasing its visibility to a wider audience.
- Inter-sectorial and multi-disciplinary collaboration: starting a business can also lead the researcher to collaborate with other researchers and field experts to develop a product or service.

Disadvantages:

- Risk of patent failure
- Financial risks: starting and growing a business involves taking financial risks due to high initial costs and market uncertainty.
- Lack of entrepreneurial skills: creating and growing a start-up requires certain competences to run a company effectively that academic researchers may lack, such as business management, commercialisation strategy, marketing and communication, intellectual property, financing or leadership skills.

In sum, entrepreneurship has an important societal impact by contributing to job creation, innovation and economic growth. Entrepreneurial researchers can actively contribute to their local community development and to solving societal problems, whether they collaborate with the socio-economic world as an academic researcher or create their own start-up company.



Engaging in entrepreneurship nevertheless involves challenges and risks such as managing financial and human resources, protecting intellectual property, competition and market uncertainty. It is therefore important for researchers to be well-informed and prepared before embarking on an entrepreneurial adventure. Thus, participating in pre-accelerators, innovation hubs or other training/incubation activities is highly important to diminish the risks (related to lacking competencies) entering a market.

3) EU-CONEXUS partners good practices

EU-CONEXUS-RFS partners' strategy and organisational structures already support in different ways the entrepreneurial mindset of their researchers.

A few examples are listed below:

Among its strategic directions, Klaipeda University aims to « promote access to scientific knowledge for business, study and scientific cooperation, creation, implementation and development of innovations » and to « promote the transfer of the latest scientific knowledge to the sectors of the blue economy strengthening the sustainable development of the region » (Appendix 1). These objectives are supported by the creation of an effective intellectual property and knowledge transfer management model, regional cooperation between business, education and research and the so-called « Blue Growth Leaders Academy »², a training programme for business leaders and professionals on Port and Shipping, Blue Biotechnology, Sea and Coastal Tourism and Innovation Management and Business Strategy, also acting as a strong networking platform between KU research community and its regional innovation ecosystem. This programme has recently been extended to the whole EU-CONEXUS Alliance³.

With regard to training, data collected in Deliverable 5.2 “Checklist of good practices for cooperation with innovation ecosystems” and the listing of all partners' PhD courses within EU-CONEXUS+ WP4 Joint PhD Actions shows that most partners offer courses to PhD students to develop their entrepreneurial skills, such as Innovation Strategies, Business Management, Sustainable Business Development, Team Building and Creativity Development (KU), Intellectual Copyright and Research Valorisation (LRUniv) or Building my Career Project (UTCB). Yet, at the time of Deliverable 5.2, almost no RFS partner provided such targeted courses to more senior researchers – this audience rather seem to receive individual coaching⁴.

² Klaipeda University Blue Growth Academy <https://bgla.ku.lt/>

³ EU-CONEXUS Stakeholder Academy <https://www.eu-conexus.eu/en/stakeholder-academy/>

⁴ EU-CONEXUS-RFS D5.2 Checklist of good practices for cooperation among actors of innovation ecosystems, pp.15-16 <https://www.eu-conexus.eu/wp-content/uploads/2023/05/D.5.2-Checklist-of-good-practises-for-cooperation-among-actors-of-innovation-ecosystems.pdf>



All partners have structures that support Innovation, Technology Transfer and Commercialisation processes, whether they are internalised or externalised, institutional, local or regional support offices. They monitor and detect innovative research projects and potential invention disclosures, support proof of concepts and research valorisation, share market and project funding opportunities to researchers. They provide resources, training and coaching to develop researchers' knowledge on project proposals, intellectual property, patent filing, contracts, agreements and other issues related to Innovation, Knowledge and Technology Transfer. Some institutions, such as LRUniv, provide mentoring incubator schemes for researchers willing to develop an entrepreneurial project and even create joint public/private laboratories with companies⁵.

Innovation events, business ideas competitions, networking platforms/events involving researchers and socio-economic actors are an established practice among certain partners. For others, entrepreneurship events mostly focus on the link between students and the socio-economic world for professionalisation purposes.

Finally, some partners provide innovation spaces (labs, hubs, collaboration with science parks) to reinforce collaborations with stakeholders and innovation capacity.

More details on these good practices and strategies can be found in [Deliverable D5.2](#), [Milestone 14](#)⁶ and in Annex 1.

Joint actions within the EU-CONEXUS Alliance and EU-CONEXUS-RFS also aim at developing favourable conditions to nurture researchers' entrepreneurial mindset and valorise EU-CONEXUS research.

Among them, we can name the creation of the EU-CONEXUS Innovation HUB website that will publicly showcase innovative research projects conducted in collaboration with socio-economic partners, a Research & Innovation Information System (research portal) to develop links between researchers of the Alliance and promote external services for stakeholders and society, research exhibitions, hackathon and innovation idea contests, networking events with industry participants, joint project submissions (including responses to innovation project calls), and more generally all the exchange of practices and exploration work conducted to better understand our respective environments, in order to remove barriers for further collaboration within our Alliance in the field of Research & Innovation.

⁵ <https://www.univ-larochelle.fr/en/research-and-innovation/our-structures/public-private-laboratories/>

⁶ EU-CONEXUS-RFS Milestone 14 Guidelines for initiation of grass-root networking <https://nextcloud.eu-conexus.eu/index.php/s/EBSBgNFddMepLQp>

Lessons learnt from activities conducted during the RFS project

This report aims to better understand the Alliance researchers' level of knowledge about entrepreneurship. To do so, several activities were conducted in the course of the project to observe researchers' attitudes and perceptions of the subject: partners interviewed a sample of researchers in their institution, a hackathon involving teams of researchers was carried out and "grass-root" networking activities were organised. The section below describes these activities and the lessons learnt.

1) Hackathon

The **Smart4Coast hackathon** was a 3-day event held from 31st January to 2nd February 2023 (ending with a cultural visit on 3rd February) at the University of Zadar which involved:

- 6 teams of 4 participants each composed of PhD students, Postdocs or Researchers (2 participants were not able to come in the end for logistical reasons)
- 1 mentor per team coaching them
- 5 jury members (representatives of RFS, local authorities, business companies and student community)
- 2 staff from LRUniv (Task 5.2 coordinator and RFS institutional coordinator)

A page was created on the EU-CONEXUS website with the help of RFS WP7 leader and EU-CONEXUS Joint Communication Unit. It presented the [event](#), its [rules](#), a registration form and an [information booklet](#) providing guidelines and the programme to participants.

A [post-event article](#) was also published on EU-CONEXUS website in the aftermath of the hackathon.

This activity aimed to understand the mindset of researchers on the subject of entrepreneurship. During a 3-day event, participants followed 3 workshops on entrepreneurial tools - Business Model Canvas, Prototyping, Oral pitch – in order to help them start from a research idea and mature it into a marketable product. The idea here was to observe their 'appetite' for these tools which they do not use in their daily lives.

- The **Business Model Canvas** method aims to get an overview of a value proposition. Researchers were asked to draw up a BMC diagram for their project idea, to make it suit a real market: which users are they addressing, who the partners are, what are the costs and what impact it can have on the company. Most of the researchers interviewed after the workshop had already heard about this tool but did not use it in their daily work. For

some of them, it was a complete discovery. The feedback on this workshop was quite positive. Some were thinking of integrating it into their process.

- **Prototyping** enables researchers to quickly explore different ideas and concepts. By creating prototypes, they can materialize their abstract ideas and visualize them in a tangible way. This facilitates rapid experimentation and iteration to test new hypotheses. Prototyping offers researchers the opportunity to explore, validate, communicate, learn, save resources, and foster innovation. It has become an essential step in the research process to transform ideas into reality. Understanding the concept of “persona” (representation of the end-user who is going to use the product or service) allows researchers to better understand their target audience, make informed decisions, guide research, facilitate communication and collaboration, and validate proposed solutions. This contributes to the design of user-centered products and services and enables more relevant and effective research.
- The **Oral pitch** workshop aimed to develop participants' skills in delivering a clear and impactful speech to present their project, by simplifying the discourse in order to address the greatest number of people and make the audience want to be part of the project.

While these tools are mostly used within the framework of a business project, they make it possible to open up a new line of questioning for researchers, to take them away from fundamental research and involve them in an innovation ecosystem.

During the hackathon, the participants (researchers) were asked about their perception of entrepreneurship and in order to get feedback on the workshops they followed.

Here is an extract of the questionnaire:

Q. Do you think that commercialising your research can help you move faster in the development of your research work and be a catalyzer for innovating?

A. Yes, collaborating with the socio-economic world can be a way to get financial support and a better understanding of the market.

Q. Did you know the tools that were just presented to you?

A. Yes but we do not use them in our daily work as they are not suited to our research work.

A. No it was really new to me.

A. No but we sometimes ask ourselves similar questions when working on business strategy.

A. I discovered and used the BMC tool during a Geography course. We have notions of these tools when answering calls for projects.

A. As regard entrepreneurial tools, I discovered "spin-off companies" at a summer school. We work with our Technology and Innovation Office to mature research work.

Q. Are you used to collaborating with socio-economic actors?

A. No, we work within the laboratory without too much outside interaction, but it can be interesting to do so in order to get a better overview of the business. Sharing with companies mainly takes place during project implementation.

Most participants had already heard of the tools but did not use them in their day-to-day work. They find the BMC interesting for understanding all the stages and impacts of the launch. While focused on their research, this type of tool allows them to step back and take another approach: that of the user. Most participants said that they did not know about knowledge transfer bodies.

When drawing conclusions on the event, difficulties in attracting researchers to participate to the hackathon were noticed – eventually, participants were mostly young researchers and PhD students. This might be linked to senior researchers' heavy workload (balancing teaching and research activities), lack of availability during this period, participation to other similar events in their own institution, or a lack of identification and interest in this type of activity.

Another conclusion from this event is that researchers are keen to understand and master every tiny detail of the project, while the entrepreneur may not stop at every detail and may not offer a finished product to the market right away.

Yet, we see great opportunities in getting researchers participate in this type of event: innovation contests can not only awaken their challenger and creativity side due to the very limited time frame and a space that gives them the freedom to apply their knowledge, but can also help them to develop or strengthen transversal skills such as co-development, collective intelligence, cross-cultural communication and teamwork with a distribution of tasks.

2) Interview of researchers

Interviewing researchers was seen as a way to have more qualitative exchanges with them to better grasp their needs and their vision of the entrepreneurial world: what areas they are aware of, what areas interest them, what tools and methods can be used to raise their awareness and accompany them.

30 researchers of different gender, seniority and scientific background were interviewed in the course of 6 months: 20 interviews were conducted by WP5 members (4 in UTCB; 4 in UCV; 3 in LRUniv; 5 in KU; 4 in AUA) and 11 additional interviews were conducted by LRUniv Engineering Master's students to involve them in this activity which is linked with the skills they learn. Following the hackathon, 3 researchers who participated to the event also answered a survey including the same questions, they are therefore counted as interviewees (1 UTCB; 1 UNIZD; 1 LRUniv).

A special focus was put on early-career researchers and on women, with 58% women and 42% men interviewed.

The panel also reflects different research disciplines and scientific areas: History, Geography, Marine ecology, Sociology, Ecotoxicology, Microbiology, Entomology &

Nematology, Artificial Intelligence, Agriculture, Microplastics, Law, Geo microbiology, Chemistry and bio-technology, Pharmacy, Electronics, Archeology, Computer sciences, Geomorphology, Social sciences, Civil engineering.

Finally, interviewed researchers had a wide range of experience levels:

- Less than 10 years experience: 22%
- Between 10 and 20 years: 45%
- More than 20 years: 33%

Topics discussed during the interviews:

1- Career path: Field of research, motivations for becoming a researcher, research valorisation

2- Entrepreneurial culture - Perception: What is a company? Interest in entrepreneurship - complementarity research and entrepreneurship

3- Entrepreneurial culture - Level of knowledge: Setting up a company - notions about entrepreneurship - desire to undertake

4- Tools for synergy: Knowledge - support systems - needs for entrepreneurship

The conclusions of the interviews are the following:

Barriers for going down the entrepreneurial path or working with companies:

- Not part of the researcher's mission, no interest for entrepreneurship
- Researchers are often deeply invested in their work and academic research, and they may not immediately see the connection between their research and entrepreneurship. It is therefore important to raise awareness early in their journey so that they see the potential benefits of commercializing their work.
- Requires getting out of the comfort zone
- The right context: solid and mature ideas, team, time, money
- Financial risk and instability: a lot of personal and financial investment
- Difference of competences between research and company running (e.g. "I know how to create a product, but I don't know how to reach users" demonstrates the importance of training researchers on tools that allow them to test their ideas in the market to ensure there is user demand.
- Reluctance of patents submission, fear of having idea stolen
- Some disciplines are not called for entrepreneurship
- Too much administration

Opportunities :

- Intention to create real-life solutions, to carry out applied research, to collaborate with business within innovation partnership agreements
- Avoid opposing research to entrepreneurship: Entrepreneurship is not only about venture creation and running while research is deeply about knowledge discovery and innovation
- Research must go hand in hand with application and implementation in the society
- Need for closer relation between research institutions and business companies to provide ideas on both sides and complement their competences

Respondents' views are very different comparing a young researcher and a highly experienced one.

Young researchers often have a broader and more innovative vision of their research field, as they are less likely to be limited by the constraints of experience and previous knowledge. Experienced researchers tend to have a narrower but more practical vision, based on their accumulated experience and knowledge.

Young researchers often have a higher tolerance for risk compared to senior researchers. They are often more willing to take risks in their research, which can lead to more innovative discoveries, while senior researchers are often more cautious in their approach to research.

Senior researchers often have a more established network of contacts in their research field and may have stronger relationships with industry partners. On the other hand, young researchers often have a smaller but more diverse network, which can allow them to discover unexpected opportunities.

Senior researchers have a better understanding of the industry and market trends in their research field, which can help them identify innovation opportunities and develop marketable products. Young researchers may lack this practical industry knowledge.

However, these differences are not absolute and can vary significantly from one individual to another and from one research field to another.

3) Grass-root networking events

One of the activities within Task 5.2 is the “initiation of inter-sectorial “grass-root” networking within institutions and on the level of EU-CONEXUS.

“Grass-root” organizations are defined as “self-organized groups of individuals pursuing common interests through volunteer-based, non-profit organizations, that usually have a low

degree of formality but a broader purpose than issue-based self-help groups, community-based organizations or neighborhood associations”⁷.

The strategic goal of these networking activities is to set up a tool to exchange experiences and share good practices aiming at boosting entrepreneurial behavior/culture within the researcher community (with a special focus on networking of early-stage career researchers across different disciplines and the underrepresented gender) on Smart Urban Coastal Sustainability themes. These networking activities are expected to raise the “entrepreneurial movements” at each partner university.

Guidelines to develop these activities were developed in Milestone 14, in which partners also shared plans to organize such events. In this Milestone, existing practices from the Alliance were collected and evaluated, and the following conclusions were made:

- The majority of entrepreneurship networking activities are focused on students, who are seen as a valuable resource for local and global innovation ecosystems to which they can contribute through creating new start-up companies or aiding in the development of existing businesses.
- There are examples of formal studies on entrepreneurship that can provide helpful methodologies for selecting relevant topics for the consortium’s non-formal grass-root networking events.
- Examples of best practices in cooperation with regional stakeholders can encourage partners to view grass-root networking from the stakeholders’ perspective, eventually leading to the involvement of academia in the resolution of their problems.⁸

In order to further integrate researchers and organize more events focused on entrepreneurship, new initiatives of this type have been started in the partner universities.

Below is a report of the activities that already took place at the time of writing this report:

a) Klaipeda University: “Self-reflection” workshop at the Marine Research Institute, 23 March 2023

A “self-reflection” workshop at the Marine Research Institute (MRI) of Klaipeda University was held on 23 March 2023. One of its aims was to increase awareness and foster entrepreneurship among researchers, doctoral students, and administrative staff.

The results of the individual and group tasks were reported to the management of MRI with the goal of making these events a regular occurrence in order to better address identified challenges in a short-time period, using ‘entrepreneurial’ tools and skills.

⁷ https://webgate.ec.europa.eu/fpfis/mwikis/aidco/index.php/Grassroots_organization

⁸ EU-CONEXUS-RFS Milestone 14 Grass-root networking guidelines, p.5 <https://nextcloud.eu-conexus.eu/index.php/s/EBSBgNFddMepLQp>

The aim of the workshop: Based on the annual results of research, raising awareness and the entrepreneurial spirit among researchers, doctoral students and administrative staff.

Participants: staff of the Marine Research Institute (MRI) gathered on voluntary basis (25 participants) after the annual Marine Research Institute Board meeting.

Duration: 2 hours.

This was an informal meeting of the Marine Research Institute staff to reflect the R&D&I activities seeking to do a SWOT analysis in a non-formal manner combining individual and group work. At the same time revealing the problems and possible solutions connected to entrepreneurial challenges.

Workshop activities:

1. Individual assignment.

- **“The Competence Bank”**. The aim of this task was to define a research and innovation potential of the Institute based on existing competences.

The interactive task to be answered individually using the www.padlet.com app.

The question asked: which competence(s) fit(s) most to you?

Each participant had to identify himself with one of the groups he/she belongs to putting the identified competences under his/her group. Considering the competences defined, the participants could be assigned to one of the “4 innovators types” (Idea Generators, Conceptualizers, Optimizers, Implementers) or to assign him/her to the group of Communicators.

- **“The Challenges Map”**. The aim of this task was to define what specific challenges are facing staff of the MRI in their daily R&D&I activities based on their institutional position (role).

The interactive task to be answered individually using the www.padlet.com app.

The question asked: what challenges do you face in your daily activities?

Each participant was asked to write down the challenges which are relevant to different positions (roles) of MRI staff. Considering the positions (roles), the participants were asked to define specific challenges relevant to: researcher, lecturer, administrator, head of the laboratory, lab technician, project manager.

2. Group assignment

The participants have been split into 4 groups – 6 persons each.

The tasks for the groups were announced together with the short instruction how and when the task shall be accomplished. The groups were asked to name the main (up to 5) **strengths, weaknesses** they face in daily R&D&I activities pointing out the **solutions** how to cope further on.

The groups presented their findings and the colleagues had possibilities to comment or suggest some solutions.

Main results: The Top 3 challenging areas identified: communication; common strategic vision (assumption: due to the lack of team spirit), research/project management.

The material and outcomes both from individual and group work were saved, stored and analyzed.

The results reveal that boosting of the entrepreneurial mindset is a hot topic for MRI, as all the above mentioned top challenges are related to entrepreneurial skills.

Outputs/ Further Actions:

The results of individual and group tasks were provided to the management of MRI, i. e. MRI Director and MRI Board. It was decided to organize the next informal meeting of MRI staff dedicated to self-reflection of the first workshop outcomes with the aim to set up a “bottom-up” strategic action plan defining short term (1 year) actions aiming at solving the top challenges defined. It is expected that focus on gaining the entrepreneurial skills will be of high importance.

b) La Rochelle Université: Innovation Lunch, 23 March 2023

On the same day as Klaipeda University's event, La Rochelle Université hosted a social gathering to reflect on the accomplishments and research conducted by the university research teams as well as to discuss the involvement of researchers/doctoral students in these projects. The University's research units are committed to promoting the economic value and development of innovative projects.

It started from the following observation: during exchanges with researchers, what emerged was the lack of knowledge regarding projects conducted in different research units and a lack of knowledge about the socio-economic and industrial sector. There is misinformation about the resources and support systems available to researchers to valorize their work.

The idea was to create working groups to promote the pooling of expertise, human and material resources, and most importantly, communication about the work conducted by each research group. This is how we created the innovation cafés/lunches.

The first meeting, organized in collaboration with the SATT (Technology Transfer Office of France Nouvelle Aquitaine region) gathered 14 people from research, innovation and the university governance including the Rector of the University and Vice-Rector for Innovation.

During this first meeting, researchers had the opportunity to share their experience.

The key takeaways are the following:

- It is essential for researchers to put themselves in the shoes of industry stakeholders, to develop collaborations having a good understanding of the socio-economic world challenges and using a common vocabulary.

- Participating in events such as the Science Festival, where they explain their work to a wide audience including children, is a beneficial experience for science popularization. Researchers question their societal impact and how they can be useful to society.
- It is important to form teams with complementary skills to foster success. The concept of collective intelligence is emphasized. Events and word-of-mouth within laboratories encourage entrepreneurship. The creation of companies is facilitated through the reduction of administrative tasks via the SATT (Technology Transfer Acceleration Company). Leadership is also considered essential for engaging teams. Awareness of innovation is recommended within laboratories.
- It is observed that research is often disconnected from industry. Moments of exchanges are proposed to link fundamental research to idea development and the formation of teams for specific projects. The creation of "success stories" is encouraged to inspire others. It is also suggested to accelerate the processes of idea submission, patent filing and article writing. PhD students are encouraged to consider the possibility of patenting or starting a company early in their thesis.
- It is noted that there is little identification of industry needs for researchers who do not already have such kind of collaborations. Researchers seek to push the boundaries of knowledge and bring innovation, but they often lack resources such as time, money and support. Therefore, they seek partners to fill these gaps. The idea of adding value to what already exists is mentioned, but there is a debate about whether researchers should advance knowledge rather than product innovation. Some researchers conduct surveillance and differentiate themselves by seeking information in scientific articles to find data on competition and innovative ideas, but this does not necessarily constitute product innovation.
- The idea of presenting a project to a SATT (there are 13 SATT in France) or an expert is discussed. The researcher alone cannot innovate in the market sense and it is important to distinguish innovation and technology transfer.

We see the following purpose and benefits in these meetings:

Researchers from different fields bring unique and complementary perspectives to the table. Their diverse experiences and knowledge help to consider entrepreneurial topics from different angles, fostering creativity and innovation.

When researchers from different fields collaborate, synergies between their skills and respective areas of expertise can lead to significant scientific, technical, or technological advances, which can then be applied in the business world to solve societal problems and create value. These informal networking events can encourage sharing of ideas, methodologies and concepts between disciplines, enriching researchers' knowledge and opening to new collaborations and interdisciplinary research opportunities.

When researchers from different fields work together on an entrepreneurial project, they can bring scientific rigor to idea and concept validation. Their scientific expertise can contribute to evaluating technical feasibility, testing hypotheses, and empirically assessing results. This can enhance the credibility of the company and increase chances of success.

Bringing together researchers from different fields can also provide expanded access to resources and networks, each researcher bringing their own connections, collaborations and research infrastructure, which can be beneficial for the company in terms of accessing funding, potential partners or research facilities.

In summary, bringing together researchers from different fields around an entrepreneurial topic promotes interdisciplinarity, creativity, innovation, and problem-solving.

c) Catholic University of Valencia: "Research and Business: A Perfect Symbiosis", 18th May 2023

On 18 May 2023, a round table with R+D+I directors from the agri-food sector was held at the Santa Ursula headquarters, with the aim of promoting a close relationship between academic research and business research. During the event, the speakers emphasized the relationship between universities and companies as a key factor in open innovation, sustainable processes, and the pursuit of joint innovative solutions.

The round table was moderated by David Servera, Associate Dean of Economics and Business at the Faculty of Law, Economics and Social Sciences of the UCV. More than one hundred participants, including undergraduate students and researchers, had the opportunity to hear and discuss about the main issues facing companies when it comes to research and innovation. And this research is influenced both by consumers and by legislation and technological advances.

Thus, a number of issues were addressed:

Laia Alemany from the Vicky Foods group underlined the growing importance of open innovation. Through challenges launched by companies, external groups provide solutions in such a way that high research costs can be saved and agility in the face of demand can be gained. She also stressed that we were in the "era of alternatives" (to eggs, sugars, animal protein, etc.), which required continuous innovation and adaptation to the market, marked by regulation and changes in consumer habits.

Another of the speakers, Ricardo Garijo from Font Salem, pointed out that, in the development of a new product, sustainability was very much present. Sustainability to improve energy consumption, the water footprint or the materials used in the packaging and that responded to a greater awareness of the optimisation of resources.

And this sustainability, as Elena López from Helados Alacant pointed out, was also linked to another challenge such as increasing the useful life of the product.

The other two speakers, Bryan Germán from Grupo Ardo and Ignacio de Miguel from IDM Corporate Solutions, ended their speeches by stressing the importance of a good working environment that facilitates the joint search for solutions to the challenges faced by the company and the importance of the university-company relationship.

On this last point, it is essential that the needs of companies converge with the contributions of universities so that the result is reflected in society, either in employment or in products and services.

A [LinkedIn post](#) on the event was later published, as well as an article in the [UCV news section](#).

d) Technical University of Civil Engineering Bucharest: Hackaton, 19 May 2023

On 18-19th of May 2023, UTCB staff members participated at the 3rd edition of the INNOCONSTRUCT International Conference - How Digital, How Fast, a conference about innovation in the field of constructions.

The panels of the conference were dedicated to the advancement of the digitalization process in the construction industry. New approaches in the development of digital skills in construction and the technologies and solutions that support digitization, energy efficiency were highlighted.

During this event, UTCB also hosted a hackaton involving students, teachers, and stakeholders. A total of four teams participated, consisting of a maximum of four UTCB students, plus one teacher and one stakeholder. Their aim was to identify solutions for the societal challenge we proposed – using the Digital Twin concept in building renovation to reduce the environmental impact. The students had to come up with innovative solutions taking into account the challenge proposed and to show how they can be applied on some of the spaces of the most famous building in Romania – The Romanian Palace of the Parliament, the heaviest building in the world and second largest administrative building in the world.

At the end of the Hackathon, two teams that best presented their creative solutions were awarded by the jury made up of specialists and representatives of the [Romanian Cluster TEC Association](#) with a prize worth 1000 euros which was split between the two winning teams, as the jury considered both of them worthy of the 1st place.

Their solutions included the following processes:

- proactive consolidation and a heat map of the building, 3D scanning, the use of a thermic room, the use of photometrics, the use of BIM (Building Information Modelling) Technologies, Team III, entitled Eezy Evolve

–photovoltaic panels, reflective thermal curtains, geothermal pumps in Izvor Park (near the Palace of the Parliament), temperature sensor, CO2 sensor, natural light sensor, Team IV entitled ESL – Energy Saving Solutions.

The agenda of the event can be accessed here: <https://innoconstruct.ro/#agenda>.

An [article](#) was published on the EU-CONEXUS website following the event.

This event helped UTCB to develop the relation with stakeholders and involve them in the development of our activities and in the improvement of the students' skills in entrepreneurship, research and digital twinning technology.

e) Agricultural University of Athens:

- o WORKSHOP "The prospects for the development of research teams of the AUA in a joint event with National Documentation Centre (EKT)", 13 February 2023

A workshop entitled "Funding, networking and technology transfer opportunities for mature AUA research teams" was organised on Monday 13 February 2023 by the National Documentation Centre (EKT) and the Agricultural University of Athens (AUA). The workshop was held at AUA's premises following the Memorandum of Cooperation between the two bodies signed in July 2022 to support the research, business and development activity of the institution.

Research teams with mature technological solutions, start-ups and spin-offs, as well as researchers who have not set up a business or any other exploitation scheme, but have results from applied research with potential for further exploitation, were invited to the workshop.

EKT staff participated with speeches and presentations by Dr Nikos Karabekios, Head of EKT's Innovation and Networking Unit, Angelos Angelidis, Coordinator of Enterprise Europe Network Hellas, George Megas, Barbara Vasilaki, Dr Sofia Xesfiggi and Marios Roidis.

In the second part of the workshop, focused presentations were made by start-ups and spin-offs that AUA has supported and promoted. Initially, #SmartAgroHub Vice-President Michalis Stagos and Innovation Grant Application Expert Thanos Karvounis presented all the services provided by this incubator and the potential ways of cooperation with EKT. Then, the co-founder and CEO of #EnzyCeuticals, Professor Nikos Lambrou, presented the sectors and prospects of utilizing enzyme biotechnology, a scientific and technological subject of this spin-off. Subsequently, the co-founder of #Thermodraft Ann. Professor Dimitris Manolakos presented the mechanical applications developed by the spin-off as well as the manufacturing and industrial sectors in which commercial interest is already recorded. Then, the co-founder of #Edencore Nikos Mylonas took the floor and presented the platform and supporting technology for visual recognition of diseases affecting tree crops and the relevant image data library. In addition to the above, an oral presentation was made by Ann. Professor Golfo Moatsu.

A dialogue followed and participants had the opportunity to be informed and explore targeted business and research funding prospects.

- **Actions for information, education, and training, March 2023**

In the context of strengthening the entrepreneurship of the academic community, cycles of training and seminars are organized with the aim of creating a culture in matters of technology transfer and innovation. The **first** axis is the *empowerment* and specialization of the innovation office staff to meet the provision of high-level services, as well as the participation of staff in conferences or specialized exhibitions related to the networking of the technology transfer office.

The **second** axis prioritizes the organization of rapid *seminars, conferences, forums*, for the education of members of the academic community in matters of innovation, entrepreneurship, and technology transfer, which will take place in specific cycles with parallel additions according to the needs of the trainees. They will be conducted in small groups (up to 20 people) for better understanding and identification of the subjects that each trainee lacks (intellectual and industrial property, patent, exploitation of the patent, establishment and legal forms of business, funding).

The purpose of education and training is to provide the necessary (basic and specialized) knowledge to allow entrepreneurial self-reliance, familiarization with the appropriate tools and procedures, and the acquisition of skills and practices necessary for the management of a business, as well as to ensure the formation of a suitable entrepreneurial and innovative culture within the academic community. As part of the above actions, a training session for the staff of the technology transfer office took place on Monday, March 27, as well as one for the broader academic community on Friday, March 31. The trainings took place online from The Hon. Professor at the Department of Economics of the University of Piraeus, Kyriakos Drivas. An expert in innovation management, intellectual property rights and technology transfer will present the training seminar.

Educational seminars consist of two cycles regarding the target groups of the university. The most important one is the encouragement and training in technology transfer, entrepreneurship, and innovation for young researchers, postdoctoral fellows, and doctoral candidates, aiming to combine their recent research work with the prospect of creating innovative technologies and products. Additionally, empowering young female researchers is an issue that the Agricultural University of Athens aims to promote in future training cycles, in order to highlight women's entrepreneurship within the institution. Until the end of July, a cycle of **40-hour seminars** is conducted by specialized personnel, providing training on entrepreneurship and innovation topics. The cycles of educational activities focus on the development and improvement of researchers' skills at three levels:

At the knowledge level:



- a) Acquire general knowledge and cross-cutting skills to leverage the full value of research results and maximize their socio-economic impact.
- b) Be familiar with the variety of channels and tools for knowledge exploitation and transfer, and understand the reciprocal relationship between research results, innovative entrepreneurship, and intellectual property.
- c) Be aware of developments at the European Union level regarding issues of sustainable development and financing, the policies of the Green Deal, climate neutrality, and the new EU regulations for ESG (Environmental, Social Governance).
- d) Gain the necessary knowledge to enable entrepreneurial self-reliance, modern decision-making tools, and familiarity with entrepreneurship, with an emphasis on the agro-industrial sector.

At the skills level:

- a) Choose the best strategy for exploiting research results and connecting them with the job market and broader society.
- b) Select the appropriate combination of professional and cross-cutting skills.
- c) Choose the right strategies for managing intellectual property in knowledge transfer activities.
- d) Collaborate with other members of the academic community with the purpose of...
- e) Properly manage intellectual property.

At the attitudes level:

- a) Adopt the basic principles of adult learning.
- b) Recognize the importance of lifelong education as a means of adapting to the changes driven by the green and digital transition.
- c) Embrace the value of widespread dissemination of knowledge created through public resources.
- d) Understand the importance of becoming active partners in co-creating value-added innovation.
- e) A second cycle of seminars involves deepening the knowledge and practices for the staff of the Technology Transfer Office. The high level of services it should provide to the university's researchers will be achieved through intensive and targeted training actions on topics that concern a modern technology transfer office.

○ [EIT Food \(European Institute of Innovation & Technology\)](#)

The *Agricultural University of Athens*, utilizing its research and educational experience, participates as a **regional hub** in the pan-European partnership of the European Institute of Innovation & Technology (EIT) Food. EIT Food, established by the European Institute of Innovation & Technology, is a pan-European **partnership** that focuses on entrepreneurship and innovation in the food sector from various partners throughout Europe. The Agricultural University of Athens, in collaboration with the non-profit organization Industry Disruptors Game Changers, submitted a relevant proposal to the EIT Food crisis committee. EIT brings together over 1,000 partners and is Europe's largest innovation network and the connecting link between partners. The broader EIT Food community includes leading companies and innovative start-ups, as well as universities and research centers from the wider agri-food sector. EIT Food serves as the connecting link between these stakeholders, as well as investors, with the aim of promoting innovation, increasing employment and providing sustainable development opportunities for Europe. The Agricultural University of Athens, in collaboration with the non-profit organization Industry Disruptors Game Changers, is taking advantage of this opportunity to participate in this partnership in order to contribute to the development of the agri-food sector in Greece and Europe. Below are listed the most important actions of the EIT Food programme.

- a) The wider EIT Food community includes leading companies, innovative start-ups, universities, and research centers from the broader agri-food sector. EIT Food serves as the connecting link between these stakeholders and investors with the aim of promoting innovation, increasing employment, and providing opportunities for sustainable development in Europe. EIT Food connects innovation with the primary sector by boosting the agri-food system through the **Test Farms** program. It targets groups and start-ups that have a technological innovation in agri-food and wish to test it under real conditions. The selected groups will receive financing for trials and will have the opportunity to validate their idea.
 1. Application period: April 4th to May 4th 2023
 2. Evaluation and selection of program participants: May 4th to May 16th 2023
 3. Announcement of the results (pre-selection for farmer matching): May 18th, 2023
 4. Match-making event: May 19 to June 20, 2023 - Shortlisted startups & individuals will be invited to join one of the match-making events, where they will meet with farmers, evaluate the possibility of testing their innovative solutions on their premises and together create a plan for testing the technology.
 5. Testing phase: July 2023 - July 2024 - Innovators test their solution on the premises of the farmer/test field according to the plan created during the match-making event.
 6. Demo Day: July 2023 - July 2024 - Following the testing, selected Innovators together with farmers will organise a Demo Day for local farmers/clients to attend, test the solution and possibly buy the product/service.
- b) The **EIT Jumpstarter program** is aimed at individuals with innovative ideas, project research teams, scientists, postgraduate or doctoral students who have an idea for innovative products or services in the fields of agri-food, healthcare, raw materials, energy, urban mobility, or processing. The deadline for submitting business ideas is April 16th. After that, the selection of ideas will take place, and participants will be invited to the bootcamps in May. The bootcamps themselves will be conducted online and will be held from May to June. Following the bootcamps, there will be local joint training sessions from July to September. Finally, the Grand Final is scheduled to take place in late November.

- c) The EIT Food **RIS Fellowships** AL project is a highly esteemed program that provides a unique opportunity for Master's and PhD and graduate students from EIT RIS countries to gain professional, paid internships in the food industry. This program is designed for students with diverse educational backgrounds who are seeking to gain valuable hands-on experience in the field of food science and technology. The program is divided into two core components: the RIS Fellowships for *Master's and graduate students*, and the RIS Talents for *PhD students and postdocs*. These components are designed to promote brain circulation and enhance the innovativeness of personnel by supporting the creation and diffusion of high-quality new knowledge, competencies, and solutions to food system challenges. The internships offered through this program range from 3-6 months in duration, providing students with a comprehensive understanding of the food industry and its various challenges. This program offers an opportunity for students to gain a deeper understanding of the food industry and to develop their skills and knowledge in a professional setting. The EIT Food RIS Fellowships AL project is an excellent opportunity for students who are passionate about food science and technology and are looking to make a meaningful impact in the field. With the support and guidance of industry professionals, students will have the chance to gain hands-on experience and contribute to the development of innovative solutions for the food industry.
- d) RIS **Straight2Market** is a program that aims to enhance innovation and market competitiveness in Southern RIS (Regional Innovation Scheme) countries by facilitating the introduction of new value-added products into the market.

The RIS Straight to Market (S2M) program is an initiative developed under the RIS scheme of EIT Food. Its primary goal is to assist start-ups and small or medium-sized companies from Southern RIS countries in bringing their new or significantly improved healthy and sustainable food products to mainstream markets and supermarkets. This is achieved through a collaborative and participatory process involving selected start-ups and retailers.

The program emphasizes a strong market-oriented approach while also engaging with consumers through co-creation activities. These activities are designed to listen to consumer needs and demands during the development and testing phases of the new products. By improving production capacity, technology, ingredients, packaging, nutritional profiles, labeling information, and other innovative features, RIS S2M enhances the innovation capacity of local ecosystems.

One of the key objectives of the program is to reduce the distance between producers and retailers and foster closer relationships between them. By facilitating close collaborations, RIS S2M supports market research, product development, and commercialization for producers, while retailers gain a deeper understanding of the new products to be launched. Ultimately, this leads to increased consumer options in supermarkets with the introduction of new and improved healthy food products.

By fostering competitiveness and innovation in the food sector, the program contributes to the creation and maintenance of quality, stable jobs in communities. A vibrant and innovative food sector also enhances the overall competitiveness of the European Union. The RIS S2M program connects start-ups and retailers, enabling them to collaborate on the development and launch of new products.



The selection process for the program involves an open call with clear and transparent selection criteria. Two separate open calls are made: one for retailers and another for start-ups/scale-ups. EIT Food provides the selected retailers with a pool of start-ups that have applied to the program. Each retailer can choose a maximum of four start-ups. Once selected, retailers and start-ups form informal consortia to work together on the preparation and implementation of activities.

Both the start-ups and retailers commit to working together in designing co-creation activities with consumers, media dissemination of the project, and the commercialization strategy and plan for introducing the new product to the market.

Recommendations

Higher Education Institutions (HEI) can activate several levers to foster the entrepreneurial mindset of their researchers. Below are proposals of actions and tools that we can put in place or develop within our universities to boost an entrepreneurial culture in our research community:

- **Encourage awareness raising:** Organize workshops, seminars or events to raise researchers' awareness on entrepreneurship and innovation. Successful entrepreneurs or field experts could be invited to share their experiences and inspire researchers. The role of the Technology Transfer Office is key to raise awareness, intervene at various stages of the researcher's journey and provide guidance on the tools and strategies they can use to develop their idea. Communicating at the right time and consistently with researchers is crucial to raise their awareness about entrepreneurship.
- **Develop training programmes:** Specific training programmes focused on entrepreneurship in research could be developed in order to provide researchers, students or young graduates with the skills to start and run a business. These programmes may include lectures, workshops, training in business management, commercialisation strategy, intellectual property, financing or leadership.
- **Focus on PhD students:** courses could be included in PhD curriculum in order to train doctoral students key concepts related to entrepreneurship and innovation such as research valorisation, deeptech entrepreneurship, financing of innovation and financial management, IP and patents, business plan, project and risk management, energy transition, sustainable development, corporate social responsibility, discovery of the innovation ecosystem and methods and tools to quickly and efficiently analyse the commercial potential of a technology with a view to creating a startup.

Local entrepreneurs and entrepreneurship and innovation professionals could intervene or supervise the courses, which would provide students with a better decision-making ability, better collaboration skills and employability in a company.

- **Provide coaching and mentoring:** personalised coaching and mentoring services for researchers who wish to become entrepreneurs can be a key in helping them make this professional move. This can include advice on project development, financial planning, IP rights protection, fund raising and access to a network of business partners.
- **Promote interdisciplinary collaborations:** Encourage interdisciplinary collaborations between researchers from different fields to stimulate innovation and business creation. This can be promoted through joint research programmes, collaborative projects and



knowledge exchange through grass-root networking activities. Universities can also organise events or provide collaborative work spaces to facilitate such collaborations.

- **Create incubators or innovation spaces:** business incubators within the university can support researchers in developing their innovative ideas with resources and support. These spaces can offer business start-up advice, prototyping facilities, networking opportunities and connections with potential investors to facilitate the research commercialisation.
- **Facilitate technology transfer:** create simplified and transparent procedures for technology transfer and commercialisation of innovations resulting from university research. Set up technology transfer offices to help researchers protect their intellectual property, find industrial partners and negotiate licensing agreements.
- **Offer financial incentives:** create grants or funding programmes dedicated to promoting entrepreneurship among researchers. These financial incentives may take the form of research grants for projects with high commercial potential, start-up funds for university spin-offs or rewards for the most innovative researchers.
- **Establish partnerships with industry:** HEI can facilitate partnerships between researchers and private companies by encouraging joint research collaborations, company placements and knowledge exchanges. These partnerships can stimulate entrepreneurship by offering researchers concrete opportunities to put their ideas into practice and add value to their research results.

It is important to stress that each university can adapt these recommendations according to its resources, culture and specific areas of expertise. The main objective is to create an environment conducive to entrepreneurship where researchers are encouraged, supported and trained to turn their ideas into successful businesses.

Conclusion

The activities that were conducted during the course of the project allowed to address the entrepreneurship subject from different angles. The hackathon was a dynamic joint event that allowed researchers from the Alliance to meet, challenge themselves and learn about useful entrepreneurial tools in order to develop innovative solutions addressing major challenges faced by smart and urban coastal areas. The interviews of researchers were an opportunity for partners to connect with their researcher community in order to better understand their entrepreneurial culture and exchange on the Innovation and KTT support services available in their institution. Finally, the grass-root networking events, which came in different format depending on partners, allowed academic researchers, students and business professionals to meet and exchange experiences around innovation, knowledge and technology transfer.

These actions positively put a focus on the entrepreneurship subject; they led WP5 members to share ideas and good practices implemented in their institutions, creating a dynamic and paving the way for institutional change and joint actions.

Some of the aforementioned recommendations are already implemented by EU-CONEXUS-RFS partner institutions. Nevertheless, it is crucial to make researchers more aware of such instruments and improve communication on the available services. Training students on entrepreneurship skills, raising researchers' awareness on KTT questions, developing shared spaces (common labs, innovation spaces, events) is also key to foster our institutions' innovation potential at student and researcher's level, and to strengthen links with external stakeholders.

At the level of EU-CONEXUS, the dynamic and exchanges around Innovation and Entrepreneurship encouraged partners to propose courses in English on Entrepreneurship and Innovation for Bachelor students in EU-CONEXUS Minors Coastal Development & Sustainable Maritime Tourism and Blue Economy & Growth. It also encouraged the Alliance to answer calls for proposals in order to continue developing and sustaining joint Innovation and Entrepreneurship actions.

Finally, harmonizing practices such as the timing of our annual innovation contests (to disseminate results and make the Alliance's researcher community aware of projects and ideas in other countries), organising common grass-root networking events and developing a knowledge base on training possibilities and support facilities can be a starting point toward a joint agenda on Innovation and Entrepreneurship. In this regard, the EU-CONEXUS Contact Point for Technology Transfer and Innovations "CONTI" part of EU-CONEXUS+ (second phase of EU-CONEXUS European University) is seen as a sustainable structure to build on the activities developed in RFS after the project ends and to support Knowledge & Technology Transfer activities within the Consortium.



References

- [1] European Commission https://single-market-economy.ec.europa.eu/smes/supporting-entrepreneurship_en
- [2] Klaipeda University Blue Growth Academy <https://bgla.ku.lt/>
- [3] EU-CONEXUS Stakeholder Academy <https://www.eu-conexus.eu/en/stakeholder-academy/>
- [4] EU-CONEXUS D5.2 Checklist of good practices for cooperation among actors of innovation ecosystems, pp.15-16 <https://www.eu-conexus.eu/wp-content/uploads/2023/05/D.5.2-Checklist-of-good-practises-for-cooperation-among-actors-of-innovation-ecosystems.pdf>
- [5] La Rochelle Université Joint laboratories <https://www.univ-larochelle.fr/en/research-and-innovation/our-structures/public-private-laboratories/>
- [6] EU-CONEXUS Milestone 14 Guidelines for initiation of grass-root networking <https://nextcloud.eu-conexus.eu/index.php/s/EBSBgNFddMepLQp>
- [7] https://webgate.ec.europa.eu/fpfis/mwikis/aidco/index.php/Grassroots_organization

Other references:

<https://www.enseignementsup-recherche.gouv.fr/fr/ou-se-fait-la-recherche-46533>
<https://franceuniversites.fr/actualite/les-enjeux-de-la-recherche-en-france-le-18-decembre-a-lassemblee-nationale/>
<https://www.imo.universite-paris-saclay.fr/~david.harari/articles/schlenk.pdf>
<https://www.tresor.economie.gouv.fr/Articles/a3833ca5-c98a-4011-854c-c11ace0fcfb2/files/ee7e33be-d1a7-495a-aac8-d5cd460fde24>
<https://www.revuepolitique.fr/quand-le-chercheur-devient-entrepreneur/>
[https://www.enseignementsup-recherche.gouv.fr/fr/l-etat-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation-en-france-84954`](https://www.enseignementsup-recherche.gouv.fr/fr/l-etat-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation-en-france-84954)
<https://www.europarl.europa.eu/factsheets/fr/sheet/67/la-politique-de-l-innovation>
https://france.representation.ec.europa.eu/strategie-et-priorites/les-politiques-cles-pour-la-france/le-soutien-la-recherche-et-l-innovation-en-france_fr
<https://www.enseignementsup-recherche.gouv.fr/fr/l-europe-de-la-recherche-de-l-innovation-et-de-l-enseignement-superieur-nouveaux-enjeux-nouveaux-48538>
<https://www.europarl.europa.eu/factsheets/fr/sheet/67/la-politique-de-l-innovation>

Appendices

Annex 1: Strategic directions on innovation and entrepreneurship at some partners

a) La Rochelle Université

Since 2017, LRUniv has initiated the so-called “CampusInnov” dynamic to promote a global approach to raise awareness, train and support students on innovation and entrepreneurship.

Strongly integrated to its regional innovation ecosystem – technology transfer organisations, technology park, etc. – CampusInnov has developed public-private partnerships (joint laboratories with co-innovation facilities, industrial thesis, ..), a variety of awareness actions and training schemes, and provides a strong expertise as well as innovation spaces to support the emergence and maturation of innovation projects.

- CampusInnov provides a tailored services offer to develop links between La Rochelle Université research units and external companies, in order to enrich companies’ R&D activities by drawing on the expertise of our researchers. We can R&D projects from their conception in the laboratory to the pre-industrial phase through a tailored offer.
- Incubation scheme for researchers (tenured, post-doctoral, doctoral) wishing to develop an entrepreneurial project related to their research work or to valorise their research work through a company, and for companies whose project relies on the university research expertise.
- Strong interactions with socio-economic actors through an organisation around 6 “socio-economic channels”:
 - Biotechnology, Agri-food & Health sector
 - Sustainable buildings, Energy & Eco-industry sector
 - Environment & Coastal Management sector
 - Nautical, Port economy & Transport sector
 - Digital sector
 - Tourism, Leisure & Culture sector

For each field, La Rochelle Université has several hundred students per year in initial training or on work-study programmes, and researchers who can call on their skills for an expertise, a study or a research project. These channels enable the University and its partners to significantly stimulate supply and demand and thus create value. This can particularly be witnessed through a significant increase in the volume of our research partnership agreements and the structuring and development of multi-disciplinary research laboratories.

Strategic directions:

- Scale up entrepreneurship awareness-raising actions for doctoral students
- Deploy a European passport of the “Innovative Entrepreneur” and create a personalised training programme according to the skills of each project owner
- Reach out to a wider audience, particularly by targeting teacher-researchers, and promote an inclusive entrepreneurial culture
- Strengthen the links between education, research and innovation to encourage the creation of deeptech start-ups
- Continue and accelerate the provision of technological equipment for project owners

b) Klaipeda University

One of the strategic directions: Value for the Region

Objective 1: Promote access to scientific knowledge for business, study and scientific cooperation, creation, implementation and development of innovations

1) Create effective intellectual property and knowledge transfer management model

Actions to be taken:

- Priority services certification, accreditation, marketing.
 - R&D results commercialization strategies preparation:
 - monitoring and analysis of knowledge and technologies transfer, R&D results commercialization processes;
 - entrepreneurship activity promotion and dissemination.
- 2) Create and implement business, studies and science cooperation model in the region, adapting European best practice;
- 3) Open science data base focused on the European sustainable urbanized coasts development initiatives.

Objective 2: To promote the transfer of the latest scientific knowledge to the sectors of the blue economy strengthening the sustainable development of the region

- 1) Establishment and maintaining Blue Growth Leaders Academy in the region and knowledge transfer to create innovative blue economic businesses.
- 2) establishment and coordination of the European Institute for coastal environment research and biodiversity

c) Agricultural University of Athens

Transfer Technology Office of Agricultural University of Athens

The education of the AUA Academic Community in innovation and entrepreneurship matters-issues as well as the efficient exploitation of research results of the Institute in the interest of the Academic Community, the Greek economy and society in general.

Three basic goals:

1. Supporting the exploitation of research results of AUA
2. Supporting the collaboration and information exchange between the Institute, industry and other productive sectors
3. Supporting AUA's students' and researchers' education in innovation and entrepreneurial issues

The services provided to researchers, academic staff, and students are:

- a) Seminars, workshops and forums organization for AUA's students' and researchers' education as well as for the wider academic community in innovation and entrepreneurial issues.
- b) Documentation of AUA 's existing research activity.
- c) Supporting AUA 's Research Staff in finding Private or Public Sector partners for the exploitation of research results.
- d) Supporting AUA's Research Staff in Industrial & Intellectual Property Rights issues, and also in finding a suitable concession contract, in drafting and monitoring said contract.

- e) Supporting spin-off creation, providing advice to all interested parties of AUA 's Research Staff
- f) Providing information to students and researchers about coping mechanisms for Technology Intensive Start-ups, such as incubators, technology parks, et cetera.
- g) Promoting AUA's Research findings for their exploitation (organising/ participating in events, exposés, et cetera).

The communication channel of the technology transfer office of the AUA is the website innovinagri.gr. Researchers can view the office's recent activities, future training or seminars, and ways to exploit their research idea.

For the implementation of all the actions of the Technology Transfer Office, **legally binding agreements** have been developed to safeguard the university's research work and its research personnel. The primary document for the Technology Transfer Office is the updated **Regulation on Technology Transfer**, the Spin-off Establishment Regulation, and the patent filing procedure, all approved by the collective bodies of the Agricultural University of Athens. Additionally, a series of legal documents available from the Technology Transfer Office include:

- a) Confidentiality Agreements
- b) Invention Disclosure Forms
- c) Technology Transfer Agreements, including:
- d) Contract Research Agreement
- e) Licensing Agreement
- f) Assignment Agreement
- g) Technology Evaluation Form
- h) Technology Incubator Establishment Agreement
- i) Template for Technology Incubator Bylaws

d) Catholic University of Valencia

Actions carried out by Office of Research and Innovation Transfer (OTRI)

Projects Office

- To provide information on R&D&I programmes of the Valencian Community, national government and the European Union, as well as other subsidies from foundations and companies.
- Promote the participation of UCV research groups in R&D&I calls for proposals, advising on the necessary requirements for their presentation.
- To identify and promote the capacities and results generated by UCV research groups.
- Promote UCV's own grants (PRE and Advance payments) for the development of research projects, congresses and conferences aimed at UCV research groups.



- Promote calls for proposals together with other entities and foundations for the development of research projects (for example, the Collaboration Agreement and the calls for proposals planned with the La Fe Health Research Institute).
- Advise and support teachers, researchers and students:
 - Attention and guidance on calls for research grants and aids announced by regional and national bodies, private entities, etc.
 - Facilitator and support in formalities, procedures, completion of forms and use of telematic applications for applications for grants and external aid.
 - Promotion of research.
- Support the processing of contracts for research personnel in charge of projects.

Scientific Dissemination Area

- Analyse public and private calls for proposals that are published.
- Write and send INFO-OTRI (Grants information service that works by subscription): short mails providing information with the most relevant characteristics of each of the calls for grants, scholarships, training sessions, congresses, prizes, job offers, courses, etc., organised by both public and private organisations at local, regional, national, European and international level.
- Send personalised e-mails to researchers according to their lines of research with specific calls.
- Sending out OTRI Dissemination mailings: disseminating and informing researchers of news of interest to them on subjects related to their research, among other types of communications (articles in reference research bulletins, congresses or very specific conferences, etc.).
- Organisation of courses, conferences, workshops and seminars aimed at research work, among others:
- How to apply for R+D+i projects at regional, national and European level, for different areas of knowledge: humanities and social sciences, health sciences and experimental sciences, etc.
- How to apply for Six-year period of Research, for different areas of knowledge: humanities and social sciences, health sciences and experimental sciences, etc.
- Round tables on current issues.
- Research Conferences to disseminate research results.
- Training courses on research topics aimed at the teaching and research staff.
- Scientific dissemination events.
- Scientific exhibitions.
- Science Week: with more than 40 activities (seminars, workshops, scape room, workshops, guided visits, courses...).
- Promote and support the participation of UCV researchers in scientific congresses, conferences and courses.
- To disseminate awarded projects, scientific publications and research results of our researchers at national and international level.



- To pay for publications and translations of our researchers.
- To publish calls for papers, conferences, etc. on the Research website and on the notice board.
- Offer the opportunity for researchers to collaborate with a UCV Research Group through the figure of External Collaborator.
- Collaborate with other entities in the organisation of calls for proposals: Bernat Beny Foundation Research Grants and Awards, Sapiència Awards through RUVID and the Generalitat Valenciana, UCV-IIS La Fe Call for Proposals, Scientific-Political Matching Programmes through RUVID and Science in Parliament.
- Facilitating the activity of Research Groups.
- Facilitate the participation of UCV researchers in project applications with external research centres to boost their research careers.
- To advise and support the protection of industrial property, by means of applying for patents, processing agreements and contracts.
- Invite schools and other entities to participate in scientific dissemination events.

e) Technical University of Civil Engineering Bucharest

UTCB Research and innovation strategic plan

UTCB research activity in UTCB has the following components: fundamental research

and application, development of innovative products and services and innovation (the transfer to the socio-economic environment of innovative products and services).

UTCB has for 2020-2024 the following objectives/activities for the management of research activity and also entrepreneurship:

- supporting the activities developed and implemented by the Student Entrepreneurship Society (SAS); facilitating links between SAS and the private sector through the UTCB Advisory Council; the consideration the possibility of obtaining additional credits for students who implement projects within SAS, credits to be included in diploma supplement; the organization of semester competitions of projects to reward the innovative ideas of students in the field entrepreneurship;
- ensuring the necessary premises for conducting research activities in transnational collectives within the EU-CONEXUS European University;
- revision of UTCB regulations for RDI activity in accordance with the best practices of inter-institutional and international cooperation;
- the development of tools and skills for research activity through projects financed from the Institutional Development Fund;
- creating and institutionalizing strong partnerships with universities, research institutes, companies and commercial companies and innovative clusters for participation in research funding competitions;
- diversification of the offer of specialized RDI services offered to industry and the economic environment;



- sustained cooperation with UTCB graduates who have acquired an international scientific reputation;
- increasing the responsibility of teaching departments and the Doctoral School for the scientific quality of doctoral theses and increasing the preliminary publishing requirements for the defense of doctoral theses;
- continuation of granting grants to doctoral students from UTCB's own funds;
- promoting the research infrastructure and services offered by UTCB through the "National Register of Research Infrastructures" portal (ERRIS - Engage in the Romanian Research Infrastructures System);
- the use of databases for the annual reporting of research results;
- equipping and modernizing research and/or teaching laboratories using structural funds;
- identification of funding sources for the rehabilitation of the research infrastructure at Murighiol in the context of the implementation of the EU-CONEXUS project;
- continuation of awarding annual awards for excellence in research;
- ensuring access to scientific documentation resources by continuing the association with Anelis Plus 2020 and ensuring the financial contribution to this program, the use of EU-CONEXUS common resources;
- concentration of valuable publishing resources on UTCB journals "Romanian Journal of Transport Infrastructure" (ISI indexed) and "Mathematical Modeling in Civil Engineering" (with a view to ISI indexing by Thomson Reuters);
- stimulating the organization of international and national conferences with international participation;

Annex 2: Interview questions

INTERVIEW RESEARCHERS FOR A REPORT OF BEST PRACTICES

Vision of Entrepreneurship in the Research Community

Describe here the global innovation strategy of your institution and related office/service.

Recommendation: introduce researchers to the spaces, tools and devices existing in your institution. Free part for each partner.

Why this survey?

Objectives: to analyze the entrepreneurial culture among researchers

- Areas that researchers know about?
- Areas of interest to researchers?
- What tools/methods can be used to raise their awareness or provide support?

Because we believe that it is essential to associate research and entrepreneurship, we want to build tomorrow's offers with you. To do this, we need to know your needs and understand your vision of the world of entrepreneurship.

We want to share your success stories but also understand your doubts about this field.



EU-CONEXUS partners share common challenges regarding the lack of entrepreneurship among researchers, especially women who are woefully underrepresented among IP-owning inventors. To encourage changes in the capacity of the academic community to enter the innovation system, innovative tools will be built by combining the expertise of existing partners (such as the EU-funded projects: Submariner Network, Baltic Gender, etc.)

The data collected during our interviews will be used internally by the University of La Rochelle and the EU-CONEXUS partners to find support solutions to facilitate exchanges between laboratories and market entry.

PART 1) YOUR BACKGROUND

1. Why did you turn to research?
2. In which area in particular?
3. How long have you been working in this sector?
4. Have you ever wanted to bring one of your solutions to market?
5. Have you ever valorized your research work through a transfer agency?

PART 2) ENTREPRENEURIAL CULTURE

1. What would be your definition of an enterprise?
2. What is an entrepreneur for you?
3. What is the difference between research and entrepreneurship for you?
4. How can research be complementary to entrepreneurship?
5. Have you ever created a company?
6. Have you tried to launch one of your research projects on the market?
7. Have you had any notions of business creation in your school or professional career?
8. Do you know the different networks that can accompany you?
9. What would make you want to start a business? And on the contrary, what is it that hinders you from starting a business?
10. For you, can research be dissociated from entrepreneurship?
11. What would you need to become an entrepreneur?
12. Are you aware of the programs offered by your university?
13. Have you ever been interested in entrepreneurship?

PART 3) THE TOOLS

1. Do you know of any support systems for researchers who want to create their own company?
2. When you come from research, when do you decide to become an entrepreneur?
3. How do innovations resulting from research find their way to the market?
4. What are you missing today as devices or tools to launch your business?

Deliverable number: D5.3

Lead beneficiary: LRUniv

Type: Public



^{EU} **CONEXUS**
Research for Society



This project has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 101017436