# D02.3 – Joint Final Report on

# Transdisciplinary Innovation

# Activities

September 2026

Work Package: 02 – Arqus Living Labs

Arqus II - Arqus Erasmus + Work Plan 2022-2026

(Project number: 101089551)

Due date: September 2026

Submission date: September 2026

Status: Public

Authors: WG02 members from partner universities of Arqus II.

Publisher: Arqus European University Alliance

Copyright: ©September 2026. The respective rightsholders.

This work is openly licensed via CC BY NC SA.

| DOCUMENT VERSION CONTROL | | | | |
|---|---|---|---|---|
| Version no. | Date | Written by/ changes made by | Changes made | Version approved by |
| **V1.0** | **31/08/2026** | **WG02 Co-Leads** | | **Approved by WP co-leads.**<br><br>**Structural and format review by Arqus Coordination** |
| | | | | |
| | | | | |

## Table of Contents

Introduction & Objectives ..... 2
Cluster Climate Change & Sustainable Development ..... 2
Overview of Activities ..... 2
One Health (in Action) Challenge-Based Learning-Programmes ..... 2
One Health and Pathogens, Parasites and Vectors: online symposiums & workshops ..... 4
Arqus Verde: Connecting Botanical Gardens for Europe's Biodiversity and Cultural Heritage ..... 4
EDU-CLIMA: Cross-disciplinary EDUcation for CLIMate Action ..... 5
Cross-disciplinary cycle of seminars and winter schools on Climate Change and Sustainable Development (CDCS-WS) ..... 6
Critical Raw Materials Days ..... 8
Proximity Matters ..... 8
Impact & Outcomes ..... 9
General Aspects ..... 9
Impact Stories ..... 9
Cluster Artificial Intelligence & Digital Transformation ..... 11
Overview of Activities ..... 11
JAI Lecture Series ..... 11
AI in the Hot Seat: Exploring (un)Trust, Transparency and Inclusivity" (2023) ..... 13
Arqus Hackathon Series (2024) ..... 13
Virtual Reality Human Library – The Human Chapters ..... 14
Exploring AI in Academia: Practical Applications and Best Practices ..... 15
Impact & Outcomes ..... 15
General Aspects ..... 15
Impact Stories ..... 16
Cluster European Identity & Heritage ..... 18
Overview of Activities ..... 18
Challenge-Based Learning (CBL) programme "Dissonant Heritage" ..... 18
European Studies in a World in Flux: Perspectives from Employers and Stakeholders (2024) ..... 21
What skills do students need in a fast-changing world (2025) ..... 21
Impact & Outcomes ..... 21
General Aspects ..... 21
Impact Story ..... 22
Strengths & Weaknesses ..... 23
Proposals for Further Improvement & Enhancement ..... 23
Concluding Remarks ..... 24

## Introduction & Objectives

The Arqus Living Lab acts as a generator of innovative responses to three major and interconnected thematic priorities for the 21st century: Climate Change & Sustainable Development, Artificial Intelligence & Digital Transformation and European Identity & Heritage. Structured around the three thematic clusters, the Living Lab brings together researchers, educators, students and external stakeholders from across all Arqus partner universities.

In alignment with the objectives of the Alliance, the Arqus Living Lab aims to bridge research and education, foster deeper cooperation between universities and their regional ecosystems and co-create actionable knowledge that contributes to both regional and European innovation strategies. Through a diverse range of activities – including Thinkathons, collaborative project labs, Science & Society events and the implementation of Living Lab principles – the initiative encourages mutually beneficial collaborations between academia, industry and society.

This report provides a comprehensive overview of the activities carried out under the Arqus Living Lab, with a focus on the initiation of **transdisciplinary innovation activities**. It presents data on events and participation, analyses outcomes and impact, summarises participant feedback and offers proposals for further enhancement. The findings reflect the Alliance's commitment to inclusive, sustainable and forward-looking higher education and its role as a driver of innovation and societal transformation in Europe.

## Cluster Climate Change & Sustainable Development

The cluster brings together dedicated academics, researchers and educators from a wide range of disciplines to exchange solutions and innovative approaches. The interdisciplinary composition of the team is a key asset, enabling a more comprehensive understanding of planetary systems and fostering the development of holistic strategies to address sustainability challenges.

### Overview of Activities

#### One Health (in Action) Challenge-Based Learning-Programmes

- Format: Challenge-based Learning Programme (CBL); Blended Intensive Programme (BIP)
- Number of participants: 38 students; 22 academics
- Fields: Sustainability; Climate Change; One Health; Environmental Health; Public Health; Biological Sciences
- Target audience: undergraduate and graduate students, academics, professionals and external stakeholders

Within the Climate Change and Sustainable Development Cluster of the Arqus Alliance Living Lab, two international Challenge-Based Learning Blended Intensive Programmes (CBL-BIPs) were developed and implemented under the thematic areas of sustainability, climate change and One Health. Both editions followed a common pedagogical framework based on Challenge-Based Learning (CBL), combining interdisciplinary online learning, collaborative international teamwork, intensive on-site activities and student-led dissemination events.

**Edition 1 (2025): Making the Planet a Healthier Place**

The first edition was coordinated by the University of Granada and implemented as an Erasmus+ Blended Intensive Programme involving the Universities of Granada, Wrocław, Minho and Vilnius. The programme focused on climate change, sustainability, environmental resilience, renewable energy, smart cities, smart farming and the broader societal consequences of global environmental change. Student mobility and participation in the physical component were supported through Erasmus+ funding.

**Edition 2 (2026): One Health in Action: Tackling Pathogens, Parasites and Vectors**

The second edition was coordinated by the University of Wrocław and implemented within the Arqus framework (Minho, Vilnius, Granada, Lyon) as an international CBL-BIP focused on the One Health concept. The programme addressed infectious diseases, antimicrobial resistance, pathogen evolution, parasitology, vector biology, environmental health and climate-related drivers of disease emergence. The activity was funded through the Arqus Innovation Fund and further expanded the challenge-based and interdisciplinary format developed during the first edition.

Both programmes were designed as joint educational initiatives, bringing together students and academic staff from multiple Arqus partner universities. Participants worked in international and interdisciplinary teams on real-world challenges requiring evidence-based solutions and stakeholder-oriented approaches. The learning process integrated scientific knowledge, practical skills, teamwork, critical thinking, communication and project-based problem-solving.

A distinctive feature of both programmes was the integration of education, research and societal engagement within a single learning framework. Students addressed complex sustainability and health-related challenges that cannot be solved within a single discipline, working at the interface of environmental sciences, life sciences, public health, social sciences and policy-oriented perspectives. The programmes therefore functioned as living laboratories for transdisciplinary innovation, fostering co-creation, stakeholder engagement and problem-oriented learning.

Both editions were structured around four complementary components:

- **Online phase**, consisting of expert-led lectures, webinars and interactive discussions delivered by academics from participating universities.
- **On-site intensive week**, bringing together students and staff from partner universities for hands-on activities, including laboratory classes, fieldwork, workshops, mentoring sessions and engagement with external stakeholders. This component enabled participants to apply theoretical knowledge to real-world challenges and strengthen interdisciplinary collaboration.
- **Challenge-Based Learning (CBL) projects**, where international student teams worked collaboratively under the supervision of academic mentors to address complex societal and environmental challenges.
- **Student-Led Forum**, an open dissemination event during which students presented project outcomes and discussed their proposed solutions with peers, mentors, academics and external stakeholders.

The programmes awarded 6 ECTS credits and promoted transnational learning, intercultural collaboration and multidisciplinary approaches aligned with the strategic objectives of the Arqus Alliance.

Website: https://arqus-alliance.eu/our-communities/arqus-living-labs/climate-change-and-sustainability-living-lab/

## One Health and Pathogens, Parasites and Vectors: online symposiums & workshops

- Format: scientific symposium and workshop
- Number of participants: 40 registered participants; 30 active participants
- Fields: Sustainability; One Health; Climate Change; Antimicrobial Resistance; Infectious Diseases; Microbial Biodiversity; Parasitology; Vector Biology; Environmental Health
- Target audience: academics, researchers, professionals, doctoral students, external stakeholders

The **One Health and Pathogens, Parasites and Vectors** initiative was organised as a one-day international online symposium and workshop within the CChSD of the Arqus Living Lab. Hosted by the University of Wrocław on 17 June 2025, the event was implemented thanks to the external Weimar Initiative of Excellence programme, supported by the French Embassies in Poland and Germany. Bringing together participants from Arqus partner universities and external institutions, the initiative addressed the interconnected challenges of climate change, antimicrobial resistance, biodiversity loss, emerging pathogens, parasitic diseases, and vector-borne infections.

The programme was structured into two complementary sessions. The first session consisted of a scientific symposium featuring keynote lectures, expert presentations, and discussions on antimicrobial resistance, microbial biodiversity, parasite ecology, and vector-borne diseases within the One Health framework. The second session took the form of an interactive workshop aimed at identifying common research priorities, exploring emerging funding opportunities, and fostering interdisciplinary collaboration among participants. Particular attention was given to the development of future research initiatives related to One Health and climate-related health challenges.

Beyond scientific exchange, the event functioned as a networking and capacity-building platform that connected researchers from different disciplines and countries. Discussions initiated during the workshop contributed to the creation of thematic research groups focused on antimicrobial resistance and vector-borne diseases, strengthening collaboration opportunities among researchers from Poland, France, Germany, Portugal, and Austria. The symposium also supported the development of new international partnerships and laid the groundwork for future joint research proposals and mobility initiatives within the Arqus Alliance and beyond.

Website: https://arqus-alliance.eu/event/one-health-online-symposium/

## Arqus Verde: Connecting Botanical Gardens for Europe's Biodiversity and Cultural Heritage

- Format: Collaboration Project Lab; Staff Mobility; Webinar Series
- Number of participants: 3 students; 8 academics; 3 non-academics
- Fields: Biodiversity Conservation; Climate Change Adaptation; Botanical Collections Management; Environmental Education; Nature Conservation
- Target audience: academic staff, technical staff, students, professionals working in botanical gardens and biodiversity conservation

The **Arqus Verde: Connecting Botanical Gardens for Europe's Biodiversity and Cultural Heritage** programme was established as a bottom-up initiative bringing together botanical gardens from five Arqus universities: Wrocław, Padua, Granada, Graz, and Vilnius. The initiative aimed to strengthen cooperation between institutions managing living plant collections and to promote joint activities in biodiversity conservation, environmental education, sustainable development, and the preservation of Europe's natural and cultural heritage.

The programme combined international staff mobility, professional networking, thematic webinars, and practical knowledge exchange. Through a series of online and on-site activities, participants explored common challenges related to plant conservation, collection management, species reintroduction, climate change adaptation, ethnobotany, and cooperation between botanical gardens and protected areas, including Natura 2000 sites.

Following a joint coordination meeting involving all partner institutions, a collaborative programme of expert-led webinars was developed, addressing topics such as the conservation of threatened species, links between in situ and ex situ conservation, climate change impacts on plant collections, natural and cultural heritage, environmental education, and best practices in species reintroduction. Each botanical garden contributed its own expertise, creating a diverse and complementary programme that reflected the strengths of the participating institutions.

A distinctive feature of the initiative was the integration of academic, technical, and conservation expertise. In addition to scientific and educational activities, partner gardens collaborated on outreach and communication initiatives, including the development of shared multimedia resources showcasing the collections, people, and activities of Arqus botanical gardens. This approach strengthened institutional cooperation, increased the visibility of botanical gardens as centres of research, education, and public engagement, and laid the foundations for future collaborative projects within and beyond the Arqus Alliance.

By fostering long-term networks and the exchange of best practices, Arqus Verde contributed to the development of a durable European platform supporting biodiversity conservation, climate resilience, and the protection of natural and cultural heritage.

Website: https://arqus-alliance.eu/arqus-innovation-fund/initiatives-funded/arqus-verde-connecting-botanical-gardens-for-europes-biodiversity-and-cultural-heritage/

### EDU-CLIMA: Cross-disciplinary EDUcation for CLIMate Action

- Format: Cross-disciplinary seminars; hybrid conference
- Number of participants: 29 (conference participants); 294 (hybrid seminar series)
- Fields: Climate Change & Sustainable Development; Education; Environmental Science; STEM
- Target audience: students, academics, professionals, external experts

EDU-CLIMA: Cross-disciplinary EDUcation for CLIMate Action is a collaborative initiative by six universities in the Arqus European University Alliance (Graz, Wrocław, Padua, Granada, Leipzig, Minho) aimed at responding to the complex challenges of climate change through innovative, cross-disciplinary education. The initiative draws on the diverse expertise and resources of its member institutions to foster new approaches to climate action education, focusing on both in-person and virtual formats. It is structured around two main components: a hybrid kick-off conference hosted by the University of Graz and a multi-month hybrid webinar series organised by all partner universities.

The webinars had the following topics:

- Dreaming towards sustainability. Hope through affect and relationality in climate literacy (hybrid, 19.12.2025)
- From stories to change: Digital eco-storytelling as activism in the classroom (hybrid, 03.12.2025)
- How should we approach picture books that promote ecoliteracy in their readers? (online, 17.12.2025)
- Let's talk trash: waste and culture (online, 21.01.2026)
- Integrating research and scientific work into education by the example of EngageMINT (hybrid, 11.03.2026)
- Feminist Storytelling as Democratic Practice: Narratives, Experience and the Politics of Everyday Life (hybrid, 06.05.2026)
- WONDERS & WANDERS. Ecocritical Dialogues with Picturebooks (hybrid, 25.06.2026)

EDU-CLIMA is grounded in the belief that education is vital for promoting climate literacy – a blend of knowledge, skills, attitudes, values and behaviours necessary for meaningful climate action. Recognising that awareness alone does not always translate into pro-environmental behaviours, the project seeks to address the knowledge-action gap by leveraging social, cultural and disciplinary diversity. The initiative includes practical tools like the Eco-Storytelling toolbox and engageMINT-Wissen platform to inspire creative and multifaceted engagement with climate issues.

The programme aims to empower students, educators and the broader public to engage proactively with climate challenges, not just through traditional activism but also through collaborative ventures across science, culture, the arts and more. By openly sharing teaching methods, research and ideas via accessible webinars and community events, EDU-CLIMA demonstrates a commitment to inclusivity, open knowledge dissemination and societal engagement.

EDU-CLIMA aspires to embed climate action as a core element of university missions, create lasting cross-sector networks and serve as a scalable model for collaborative action within the Arqus alliance, contributing to transformative educational practices, research and public awareness addressing climate change.

Website: https://arqus-alliance.eu/arqus-innovation-fund/initiatives-funded/edu-clima-cross-disciplinary-education-for-climate-action-2/

### Cross-disciplinary cycle of seminars and winter schools on Climate Change and Sustainable Development (CDCS-WS)

- Format: Cross-disciplinary seminars and winter school
- Number of participants: 303 students; 21 academics; 4 non-academics
- Fields: Climate Change; Sustainable Development; Environmental Science; Public Health; One Health; Bioaerosols; Microbiology; Ecology; Atmospheric Sciences; Geography
- Target audience: students; doctoral candidates; early-stage researchers; academics; researchers; professionals

This transdisciplinary activity consisted of two interconnected components: a webinar seminar cycle and a Winter School, both centred on climate change and sustainable development.

*Webinar Cycle on Climate Change and Sustainable Development*

From 1 October to 17 December 2024, a series of seven interdisciplinary webinars were hosted online, engaging speakers from seven Arqus partner universities: Granada, Graz, Leipzig, Lyon 1, Padova, Vilnius and Wrocław. Each session drew around 50 participants from across institutions, making this an impactful knowledge-sharing platform.

Topics covered included:

- The French-German MERLIN project
- Urban vegetation and pollen trends
- Antimicrobial resistance in a changing climate
- Global agricultural threats
- Geographical indications and food system vulnerability
- Groundwater challenges
- Arctic climate dynamics

Each webinar combined a broad introduction with an in-depth, skill-building segment and provided relevant literature for continued learning. The high level of engagement and the interdisciplinary approach not only enriched participants' perspectives but also laid the foundation for a subsequent initiative: the Winter School.

*Winter School on Bioaerosols: Scientific Insight and Collaboration*

Building on the momentum of the seminar series, the Winter School took place at Lyon 1 University from 10 to 12 March 2025, involving five Arqus universities (Granada, Leipzig, Lyon 1, Vilnius and Wroclaw). The event was also broadened through collaboration with Clermont University, part of the emerging Artemis European Alliance.

The Winter School focused on bioaerosols — particles of biological origin such as pollen, fungi, viruses and even insect-related agents like mosquitoes — which emerged as a unifying topic during the webinar series due to their relevance in both climate science and public health.

Participants, spanning disciplines from physics and chemistry to biology and computer science, shared expertise and collaborated on framing new interdisciplinary research directions. A key outcome was the collective decision to co-author a review article on bioaerosols, leveraging the diverse expertise of participants. This collaborative effort will contribute to strengthening the scientific visibility of the Arqus Alliance. Additionally, the event helped foster international ties, contributing to further funding through the Weimar Initiative, involving France, Germany and Poland.

This collaboration across disciplines and universities has led to the preparation of a scientific review paper on bioaerosols that will soon be published. This initiative reflects the core values of the Arqus Alliance: promoting academic cooperation, interdisciplinary research and concrete responses to global challenges like climate change. Most importantly, it illustrates how bottom-up initiatives can generate high-impact outcomes for European higher education and research communities.

Website: https://arqus-alliance.eu/arqus-innovation-fund/initiatives-funded/cross-disciplinary-cycle-of-seminars-and-winter-schools-on-climate-change-and-sustainable-development-cdcs-ws/

### Critical Raw Materials Days

- Format: Science & Society Event
- Estimated number of participants: over 300 people across all events
- Fields: Critical Raw Materials; Sustainability; Environmental Sciences; Geosciences; Earth Sciences; Natural Resources Management; Circular Economy; Energy Transition
- Target audience: general public of all ages; students; school pupils; academics; professionals; policymakers; external stakeholders. All activities were outreach-oriented and aimed at non-specified audiences of all ages.

Organised by the Universities of Granada, Minho, Padua, Vilnius and Wroclaw, CRM9 is a collaborative initiative dedicated to exploring the significance and challenges of Critical Raw Materials (CRMs). Recognising CRMs as a strategic cornerstone for industrial innovation and the transition to sustainable energy systems, CRM9 aims to promote responsible and efficient management of these essential resources.

From 9 to 25 March 2026, a series of outreach-oriented activities—including seminars, online talks, exhibitions and workshops—were held both virtually and locally in the languages of the organising universities. These events were open to a broad audience, including entrepreneurs, schools, research centres, start-ups, public administrations, local companies, non-profits and the general public.

CRM9 fostered dialogue and collaboration across environmental, societal, technological and economic dimensions of CRMs. By encouraging the exchange of best practices and new partnerships, the initiative supported student and staff mobility, cross-cultural exchange and a holistic understanding of CRM issues within the Arqus Alliance and beyond.

Website: https://arqus-alliance.eu/news/participate-critical-raw-materials-days/

### Proximity Matters

- Format: Collaboration project lab
- Number of participants: 385 students; 15 academics (data not final, ongoing activity)
- Fields: Climate Change; Sustainable Development; Environmental Science; Geography; Food Systems; Rural Development; Local Producers and Entrepreneurship
- Target audience: students; academics; researchers; professionals; local producers; entrepreneurs; external stakeholders

“Proximity Matters: Transdisciplinary joint teaching activities to foster collaborative networks between local food producers and tourism/leisure entrepreneurs under sustainable development and climate change prismas” is an international academic project that analyses proximity-based market channels. Through the joint work of students and teachers from various universities, the project seeks to understand how to strengthen local agri-food systems and promote rural development in the context of climate change.

The project is carried out through theoretical phases combined with applied fieldwork:

- University of Wrocław: the team focused on the Dobków region and the “Land of Extinct Volcanoes” Geopark. After a literature review, they conducted interviews with local producers and entrepreneurs to prepare a SWOT analysis of proximity food channels.
- University of Padua: students from UNIPD’s Master’s Degree in Food and Wine investigated the impact of climate change on production and tourism. The group conducted surveys in farmers’

markets and visited social cooperatives like “La Lanterna di Diogene”, where agriculture is combined with social inclusivity.

- University of Granada: the work has focused on the Alpujarra region. Through surveys and field trips to municipalities such as Trevélez and Pitres, students analysed key sectors like PGI (Protected Geographical Indication) ham production and artisanal chocolate factories to identify the strengths of local trade.

The Universities of Minho and Graz contributed to a final feedback session on the case studies conducted by the partner universities.

This platform serves as a space to share the results obtained, connecting scientific knowledge with the reality of rural producers and consumers. The final goal is to propose strategies that improve the sustainability of our food systems.

Website: https://arqus-alliance.eu/arqus-innovation-fund/initiatives-funded/proximity-matters/

## Impact & Outcomes

### General Aspects

The Climate Change and Sustainable Development Cluster successfully established a dynamic framework connecting education, research, innovation and societal engagement across the Arqus Alliance. Through challenge-based learning programmes, collaborative research activities, international mobility schemes, webinar series, workshops and stakeholder-oriented initiatives, the cluster fostered interdisciplinary cooperation among students, researchers, academic staff, professionals and external partners. Activities generated a range of tangible outputs, including open educational resources, recorded webinars, international research networks, mobility opportunities, collaborative project proposals, scientific publications under development and new partnerships extending beyond the Arqus Alliance.

Several activities evolved beyond their original scope, demonstrating the capacity of the Living Lab model to transform educational and networking initiatives into sustainable collaborations with long-term scientific, educational and societal impact. Particularly important outcomes included the creation of new international research networks, the development of joint educational resources, the strengthening of biodiversity and sustainability-related collaborations and the generation of opportunities for early-career researchers through mentoring, mobility and international project development.

### Impact Stories

#### *One Health and Pathogens, Parasites and Vectors: Building a Sustainable Research Network*

The *One Health and Pathogens, Parasites and Vectors* symposium and workshop brought together researchers from multiple countries and disciplines to address challenges related to antimicrobial resistance, biodiversity loss, vector-borne diseases and climate-related health risks. Beyond scientific exchange, the initiative resulted in the establishment of two international thematic work packages focused on antimicrobial resistance and vector-borne diseases, creating a foundation for long-term collaboration among researchers from Poland, France, Germany, Portugal and Austria.

A tangible outcome of this collaboration was the development of a bilateral mentoring and research partnership between the University of Wrocław and Université Claude Bernard Lyon 1. As a result, an early-stage researcher from the University of Wrocław obtained NAWA funding for a two-month research placement in Lyon, where experimental work related to her doctoral research was conducted under international supervision. The collaboration is expected to result in a joint scientific publication and has

strengthened the integration of early-career researchers into an international One Health research network.

The partnership also led to the establishment of a Material Transfer Agreement (MTA) between the University of Wrocław and the Université Claude Bernard Lyon 1. Through this collaboration, a new collection of *Acinetobacter baumannii* clinical isolates was transferred to the University of Wrocław, significantly expanding research capacity and creating new opportunities for studies on antimicrobial resistance and pathogen biology. This example demonstrates how Living Lab activities can facilitate not only networking and knowledge exchange, but also the development of scientific infrastructure, international mentoring pathways and long-term research partnerships.

### *Arqus Verde: From Exchange of Practice to European Project Development*

The *Arqus Verde – Botanical Gardens Collaboration Programme* demonstrates how a bottom-up initiative can transform professional networking into a strategic European collaboration. Bringing together botanical gardens from the Universities of Wrocław, Padua, Granada, Graz and Vilnius, the programme combined staff mobility, thematic webinars, professional exchange and practical training focused on biodiversity conservation, climate change adaptation, living plant collections management and environmental education.

The initiative established a durable network among the participating botanical gardens, generated openly accessible educational materials through a series of recorded webinars and facilitated the exchange of best practices related to species conservation, ecological restoration and the integration of ex situ and in situ conservation strategies. The programme strengthened cooperation between academic, technical and conservation professionals while increasing the visibility of botanical gardens as centres for research, education and public engagement.

Importantly, the collaboration evolved beyond mobility and training activities into the development of a joint European funding initiative. Building on the relationships and expertise established through Arqus Verde, participating institutions joined the preparation of a COST proposal connecting European botanical gardens and biodiversity researchers across Europe. This progression from knowledge exchange to strategic project development illustrates the long-term value of the Living Lab approach and its capacity to create sustainable transdisciplinary partnerships addressing biodiversity loss and climate-related environmental challenges.

The cluster serves as an interdisciplinary and international hub, bringing together students, academics, staff, professionals and external stakeholders. It advances the Arqus mission by addressing key issues of the digital age, including trustworthiness, transparency, inclusivity and the societal impact of AI. Through various formats the Living Lab promotes AI literacy, fosters interdisciplinary education and supports the development of innovative solutions to real-world problems.

## OVERVIEW OF ACTIVITIES

### JAI Lecture Series

- Format: Science & Society Event; hybrid; online
- Number of participants: 763
- Total number of views on YouTube: 18.928 [23.7.2026]
- Fields: Artificial Intelligence & Digital Transformation; Computer Science; Applied Mathematics; Cybersecurity; Ethics; Digital Humanities; Data Science; Media & Communications
- Target audience: general public

The JAI webinars aim to explain Artificial Intelligence in simple terms to the general public. By offering accessible insights into AI's technologies, risks and opportunities, the series fosters AI literacy and contributes to a more informed societal discourse. Designed for a non-expert audience, the lectures break down complex AI concepts, making them understandable and engaging for everyone. Topics range from the historical development of AI to its ethical challenges, practical applications in education and value alignment.

*1st Edition (Winter term 2024/25)*

- **AI - The long and winding road** by José L. Verdegay (University of Granada)
  The lecture offered participants an accessible introduction to the origins, current state and future directions of Artificial Intelligence (AI). The session was designed for a broad audience, making complex AI concepts understandable even for those without a technical background. Key approaches, methods and techniques in AI were presented, with a particular focus on how computers make decisions.
- **How do machines learn?** by Juan Gómez-Romero (University of Granada)
  The lecture provided participants with a clear and accessible overview of how machines can "learn," covering fundamental concepts in machine learning. The session explained the differences between supervised and unsupervised learning, as well as classification and regression problems. The final part of the talk addressed key topics related to generative AI, offering insights into current trends and future developments.
- **AI & Education** by Piotr Malak (University of Wrocław)
  This lecture explored practical tools and applications of artificial intelligence, with a special emphasis on generative AI (GenAI) in educational and research contexts. Participants engaged in hands-on exercises in prompt engineering, learning how to leverage GenAI to support academic and teaching activities. The session also addressed the limitations and potential risks associated with GenAI and discussed the essential role of human oversight in AI-supported content creation.
- **AI alignment and value forks** by Markus Kneer (University of Graz)
  In this lecture the concept of value alignment in artificial intelligence was examined, highlighting the challenges of ensuring AI systems make decisions consistent with human moral and societal values. The session explored how ethical values may differ depending on whether the agent is

human or AI and discussed the complexities this creates for value alignment across various domains.

*2nd Edition (Summer term 2025)*

- **What is hidden in the black box? Explainable AI** by Klaudia Balcer (University of Wrocław) The lecture explored Explainable AI (XAI) and its role in building transparency and trust in artificial intelligence. Participants learned how XAI methods can be applied throughout data science projects to create interpretable models. The session highlighted practical applications across fields like medicine, finance and e-commerce, considering the perspectives of developers, managers and end users.
- **AI and Creativity in Music** by Jérémy Cohen (French National Centre for Scientific Research) This lecture gave participants a deeper understanding of artificial intelligence in music, beyond automatic music generation. Using concrete examples, the session showed how AI enables tasks like musical transcription and timbre transfer and highlighted its potential to enhance artistic creativity and influence musical practice.
- **AI and Cybersecurity** by Mohamed-Lamine Messai (Lumière University Lyon 2) This event explored key cybersecurity challenges, showing how artificial intelligence can both defend systems and create new risks like AI-generated phishing and fake websites. Participants were encouraged to stay informed and vigilant in the evolving threat landscape.
- **Introduction to Large Language Models and ChatBots** by Giorgio Satta (University of Padua) The lecture offered an accessible introduction to chatBots, explaining their basic concepts and practical uses. Participants learned prompting techniques through clear examples, making AI technology approachable for a general audience.
- **Responsible AI: Shaping a better tomorrow** by Antonio Rodà (University of Padua) This event examined the benefits and risks of generative AI for equity, using case studies to highlight issues like bias and harmful content. Practical strategies for using AI to support social and environmental goals were also discussed.

*3rd edition (Winter term 2026)*

- **The mathematics behind generative AI models in imaging** by Martin Holler (University of Graz) This event explored how generative AI is transforming computational imaging, covering key principles, potential pitfalls and real-world examples from Magnetic Resonance Imaging.
- **How Generative AI impacts work and study** by Robert Haase (Leipzig University) This event examined the impact of generative AI on research and education, showcasing specialised web applications for scientific literature review and teaching material creation. Participants gained insights into common pitfalls, strategies to avoid them and the importance of good scientific practice.
- **Virtually alive: An exploration of AI resurrections and spectral labor in a post-mortal society** by Christian Pentzold (Leipzig University). This session examined how AI is reshaping our views on life and death by recreating deceased humans and animals. Three main modes of AI "resurrections" were identified – spectacularization, sociopoliticization and mundanization – showing how AI creates representations for entertainment, advocacy and remembrance.

Website: https://arqus-alliance.eu/arqus-innovation-fund/initiatives-funded/jai-a-journey-through-artificial-intelligence-lecture-series/

### AI in the Hot Seat: Exploring (un)Trust, Transparency and Inclusivity" (2023)

- Format: Thinkathon
- Number of participants: 20
- Fields: Artificial Intelligence & Digital Transformation; Societal Engagement
- Target audience: students; academics; professionals

The thinkathon workshop, "AI in the Hot Seat: Exploring (un)Trust, Transparency and Inclusivity," brought together over 20 academics at the University of Graz to critically examine the challenges and opportunities of AI systems. Organised in collaboration with the Arqus European University Alliance and the Interdisciplinary Digital Lab (IDea_Lab), the event fostered interdisciplinary discussions on AI trustworthiness, ethics and societal impact.

**Key Highlights**

- Session 1: Dystopian Future – When AI Goes Wrong

Explored ethical risks, human oversight and accountability in AI development through thought experiments on potential failures.

- Session 2: Thematic Group Discussions

Participants analysed key AI challenges in trust, bias, fairness, ethics, human-AI collaboration and socioeconomic impact, proposing strategies for responsible AI deployment.

**Key Outcomes**

- Identified risks and strategies to enhance AI trustworthiness and transparency
- Developed recommendations for bias assessment and mitigation
- Explored ethical frameworks for responsible AI development
- Examined AI's socioeconomic impact and policy implications
- Strengthened interdisciplinary collaborations in AI research

This interactive workshop reinforced the academic community's commitment to shaping ethical and inclusive AI.

Website: https://arqus-alliance.eu/news/key-outcomes-thinkathon-workshop-ai-graz/

### Arqus Hackathon Series (2024)

- Format: Hackathon
- Number of participants: 26
- Fields: Artificial Intelligence & Digital Transformation; Societal Engagement
- Target audience: students; academics; professionals

The Arqus Hackathon Series was designed to foster a culture of innovation and collaboration within the Arqus network by engaging students, academic staff and administrative personnel in solving pressing institutional and societal challenges, grouped together in the common questions of the Living Labs. Organised by the Arqus Living Lab on Artificial Intelligence and Digital Transformation at the University of Graz, in collaboration with the Field of Excellence COLIBRI, the hackathons provided a structured

framework for participants to develop innovative solutions addressing AI literacy, digital transformation, sustainability and societal engagement. The hackathons spanned four weeks each, allowing teams to refine their ideas and present them in a structured, supportive environment. The hackathon was supported through Moodle as a platform to house all information and resources for participants and a virtual environment (Makerspace) that was used to communicate with the team members during working on the challenge. Each edition of the hackathon followed a four-phase structure:

- Kick-off Event: Introduction, challenge selection and team formation.
- Hackathon Development Phase: Teams worked virtually to address their chosen challenges.
- Presentation Preparation: Development of final solutions and presentations.
- Closing & Awards Ceremony: Final evaluation by a jury and selection of winning solutions.

Participants developed key competencies in AI literacy, digital collaboration and creative problem-solving through hands-on experience with real-world challenges. The hackathon encouraged teamwork across disciplines and institutions, connecting participants from five Arqus universities and strengthening networks for future research and collaboration.

Practical skills were gained in virtual teamwork using platforms such as SPOT Virtual and Moodle. Formal recognition through certificates supported academic and professional development. The winning project, “Human Library in a Virtual World,” showcased the potential of digital storytelling and virtual environments to promote inclusivity and knowledge-sharing and successfully applied for the Arqus Innovation Fund 2025. The hackathon also introduced innovative methodologies for addressing challenges in AI, sustainability and European identity, inspired by the Hacking Innovative Pedagogies (HIP) project.

Website: https://arqus-alliance.eu/news/arqus-hackathon-series-2024/

### Virtual Reality Human Library – The Human Chapters

- Format: Cross-disciplinary seminars; online
- Number of participants: tba
- Fields: Digital Transformation; Societal Engagement; Inclusion
- Target audience: students; researchers; general public

One of the key challenges identified across university campuses is fostering meaningful societal engagement, particularly for international students and those from minority backgrounds. Navigating campus life can present difficulties for all students, but these challenges are often more pronounced for individuals from diverse cultural or social contexts. In response, the project addressed the question: “How can universities promote meaningful engagement with society and encourage cross-cultural dialogue among students from all backgrounds?”

To address this, the Human Chapters initiative was developed as an innovative and interactive format by the Universities Graz, Granada, Lyon 1 and Padua. In this concept, “chapters” are represented by individuals who share their personal experiences, perspectives and stories related to unique challenges, cultures, professions, or identities. Participants engage with these “living narratives” through real-time conversations, fostering deeper understanding, dialogue and empathy.

The initiative aims to provide a safe and open space for discussions on topics that are often misunderstood or stigmatised. While inspired by traditional dialogic events designed to challenge stereotypes, Human Chapters introduces a modern dimension by utilising virtual reality platforms. This approach creates an

immersive, accessible and globally connected environment, enabling genuine cross-cultural exchange and supporting the university's commitment to inclusion and societal engagement.

The initiative emerged from the Arqus Hackathon Series (see section "Impact Stories").

Website: https://arqus-alliance.eu/arqus-innovation-fund/initiatives-funded/testing/

### Exploring AI in Academia: Practical Applications and Best Practices

- Format: Science & Society Event; online
- Number of participants: 219
- Fields: Artificial Intelligence & Digital Transformation; Ethics; Social Science
- Target audience: students; early-stage researchers; academics; professionals; external stakeholders

This initiative explored the real-world applications, challenges and ethical considerations of artificial intelligence (AI) in higher education and professional practice.

Through a programme of expert talks, interactive discussions and hands-on demonstrations, including the use of AI-powered tools for exam preparation, participants gained practical insights and engaged in critical debate on the integration of AI in academic environments. The event was open to students, academic and professional staff and external stakeholders interested in understanding how AI is reshaping universities and how universities can actively shape the responsible use of AI. Input was held by researchers from four Arqus partner universities (Granada, Graz, Maynooth, Padua), experts from two external companies and one medical university.

By fostering interdisciplinary collaboration and enhancing AI literacy, the initiative supported the Arqus Alliance's commitment to innovation, digital transformation and societal engagement. The mix of practical insights, critical perspectives and cross-sector expertise created a valuable space for reflection and exchange, promoting the responsible and inclusive adoption of AI in education.

Website: https://arqus-alliance.eu/arqus-innovation-fund/initiatives-funded/exploring-ai-in-academia-practical-applications-and-best-practices/

## Impact & Outcomes

### General Aspects

The formats implemented within the Cluster Artificial Intelligence & Digital Transformation have made a substantial contribution to the core values and strategic objectives of the Arqus Alliance. By fostering open, interdisciplinary and international exchange on key topics in artificial intelligence and digital transformation, these initiatives have promoted the Alliance's commitment to democracy, diversity, academic freedom and the responsible generation and dissemination of knowledge.

The activities carried out contributed to the development of innovative practices and formats. Several projects were piloted, offering models that can be adapted, further developed, or upscaled. These initiatives were closely aligned with the objective of fostering mutually beneficial collaborations between university communities and external stakeholders.

A central added value of these formats lies in their ability to bring together participants from diverse academic backgrounds, institutions and countries. Interdisciplinary and cross-sector collaboration was strengthened through these initiatives, resulting in closer networks among participants and supporting

the implementation of joint activities. This has not only strengthened intercultural competence and global understanding but also encouraged barrier-free cooperation and the development of innovative, research-driven solutions to emerging societal challenges. The formats have provided accessible platforms for critical reflection, collaborative learning and the co-creation of knowledge, supporting the Alliance's vision of higher education as a public good and a driver of sustainable societal progress.

By making resources and outcomes widely available—often as open educational resources—the cluster's activities have extended their impact beyond the immediate academic community, fostering public engagement and supporting lifelong learning. These efforts also contributed to increased visibility for the Alliance, highlighting its role in promoting digital innovation, societal engagement and responsible technology use within the Arqus Alliance and beyond. Overall, these formats have contributed to the Arqus Alliance by supporting the development of engaged and diverse communities and by facilitating collaboration in addressing complex issues related to technology and society.

The following section will highlight two particularly successful formats from the cluster, illustrating their specific impact and best practices in greater detail.

## Impact Stories

### *From Hackathon to Human Chapters – Fostering Inclusion and Innovation through the Arqus Alliance*

In 2024, the Arqus Hackathon brought together participants from five Arqus universities, uniting students, academic staff and administrative personnel in a dynamic, interdisciplinary environment. Hosted in the SPOT Virtual Makerspace, teams worked intensively over several days to tackle real-world challenges at the intersection of artificial intelligence, digital transformation and societal engagement.

Among the many creative solutions developed, one project stood out: "Human Library in a Virtual World." Conceived by students from Graz, Minho and Padua, this initiative reimagined the traditional human library concept by moving it into a virtual space. The goal was to break down barriers—geographical, physical and social—making the human library accessible to a much broader and more diverse audience. Through digital storytelling and live interaction, the project aimed to foster meaningful connections, promote inclusivity and encourage knowledge-sharing across cultures and backgrounds.

The project was recognised by the Hackathon jury for its innovative approach, emphasis on inclusivity and commitment to sustainability and was subsequently awarded first place. Building on this success, the team continued to develop the initiative beyond the Hackathon.

Inspired by their success, the winning team applied for further support through the Arqus Innovation Fund. Their application was successful and the project—now named "Human Chapters"—received seed funding to continue its development. Led by PhD student Saumya Sadhu from the University of Graz and in collaboration with colleagues from the universities of Padua, Granada, Lyon 1 and Minho, the team initiated the development of a series of online events addressing the theme of "Diversity at Universities."

Human Chapters offers a unique platform where people, rather than books, become the source of knowledge. Participants—students and staff who have experienced diversity in higher education—share their personal stories in an open, conversational format. The aim is to make the realities, challenges and opportunities of university life tangible, not through lectures or theory, but through lived experience. This approach creates a safe and inclusive space for dialogue, empathy and mutual understanding.

Although still in its early stages, Human Chapters is already shaping up to be a lasting platform for cross-cultural exchange and societal engagement. The first edition took place in the summer term 2026, with

the ambition to make it a regular event series beyond the funding period, welcoming new voices and stories each time. By enabling people to learn directly from one another, the project aspires to build bridges, challenge stereotypes and foster a deeper understanding within the university community and beyond.

Human Chapters exemplifies the Arqus Alliance's commitment to supporting student-led innovation, promoting diversity and inclusion and creating sustainable impact through interdisciplinary, international collaboration.

> *"Our events should offer a platform where people can simply speak freely. Experiences should be shared as they were experienced. This can create a space where people can learn first-hand about the experiences of women, people of colour and queer people during their time at university."*
>
> Saumya Sadhu

*A Journey through Artificial Intelligence: JAI Lecture series*

The Arqus JAI Lecture Series has made a significant and sustainable contribution to the core values and strategic objectives of the Arqus Alliance. Over the course of the series, 736 participants attended the sessions live and the recorded lectures have attracted almost 19,000 views on the Arqus YouTube channel. This high level of engagement demonstrates the strong interest in the topics covered and highlights the series' success in meeting current information needs within and beyond the academic community.

The series directly supported the Alliance's commitment to democracy, diversity, academic freedom and the responsible generation and dissemination of knowledge. By providing an open platform for critical discussion on the development, applications and ethical implications of artificial intelligence, the lectures promoted pluralism and respect for human rights and reinforced the role of universities respectively the Alliance as spaces for open dialogue and societal progress.

A particular strength of the JAI Lecture Series was the involvement of distinguished researchers from various disciplines, who presented complex topics in a way that was accessible to both academic and non-academic audiences. This approach ensured that the lectures were inclusive and understandable, broadening their impact and relevance.

A key added value of the JAI Lecture Series was its ability to bring together participants from a wide range of (academic) backgrounds, institutions and countries. This interdisciplinary and international approach fostered dialogue across borders and disciplines, strengthening intercultural competence and global understanding within and beyond the Arqus community. The sessions also encouraged barrier-free cooperation and the development of innovative, research-driven solutions to emerging societal challenges.

The series generated several important outcomes:

- **AI Literacy & Knowledge Dissemination:** Participants gained essential insights into AI's development, applications and ethical challenges, equipping them to engage responsibly with emerging technologies.
- **Interdisciplinary & International Exchange:** The series facilitated dialogue across disciplines and countries, enhancing intercultural competence and global understanding.

- **Research & Collaboration:** Sessions inspired discussions on AI methodologies and ethics and sparked ideas for collaborative projects, including proposals for the Arqus Innovation Fund.
- **Open Access Resources:** All lectures were recorded and made available on the Arqus YouTube channel, supporting flexible, challenge-based learning and ensuring the long-term impact of the series.

By making resources and outcomes widely accessible, the JAI Lecture Series extended its impact beyond the immediate academic community, fostering public engagement and supporting lifelong learning. The series has increased the visibility of the Arqus Alliance as a driver in the areas of digital innovation, societal engagement and responsible technology use. The JAI Lecture Series has enriched the Alliance by supporting the development of engaged and diverse communities and by facilitating collaboration in addressing complex issues at the intersection of technology and society.

### Cluster European Identity & Heritage

The Arqus Living Lab cluster "European Identity & Heritage" brought together several Arqus partner universities' members, who have been interested in teaching and researching European societies, cultures and histories in their transregional connections and contexts with the aim of exploring ways of deeper cooperation between the partner universities and identifying joint avenues for research and teaching. Between 2022 and 2026 the cluster created different formats and activities which allowed an intense cooperation, connection and exchange of research perspectives to engender future joint research projects as well as to foster joint teaching formats.

The following activities were implemented during the reporting period, reflecting a significant level of innovation in transdisciplinary cooperation. The innovative character of these endeavours is evident in the integration of interdisciplinary methodologies, the establishment of new institutional partnerships and the utilisation of digital platforms to facilitate seamless cross-border engagement. Collectively, these efforts contribute to the advancement of sustainable and inclusive transdisciplinary innovation activities.

## Overview of Activities

### Challenge-Based Learning (CBL) programme "Dissonant Heritage"

The Dissonant Heritage programme was designed as a challenge-based learning (CBL) initiative to confront the complexities of "Dissonant Heritage" that evokes conflict, trauma, or contested memory, particularly in the diversity of Europe's past, wartime legacies and social inequalities. Grounded in Critical Heritage Studies, the programme sought to equip students with analytical tools, ethical frameworks and collaborative practices to critically engage contested heritage sites and narratives.

The programme's structure – blending online preparatory learning with immersive fieldwork and culminating in a digital exhibition – was intentionally designed to foster deep, transformative learning while producing tangible, long-term outputs.

The Living Lab European Identity & Heritage created the Challenged-Based Learning (CBL) programme "Dissonant Heritage" is a result of the international summer school "Dissonant Narratives: Dealing with European Universities" which was organised by the Living Lab in September 2024 in Padua. This event showcased the rich interdisciplinary diversity in critical heritage research across Arqus universities and formed the basis for the subsequent lecture series. The online lecture series about "Critical Heritage Studies at Arqus: Concepts, Approaches and Findings" which was organised during the winter term 2025/26 featured scholars from Arqus universities, advancing Critical Heritage Studies and creating a sustainable educational resource accessible to a broad audience.

This academic journey culminated in the spring school in Vilnius (June 2026), titled "Dissonant Heritage: Contested Landscapes and European Identity". With 25 master's, five PhD students and 10 experts participating, the event integrated mandatory lecture series content with interactive workshops, discussions and excursions.

The outcomes will be central to a dynamic digital exhibition at Padua's Palazzo Liviano, showcasing research on art, memory and critical responsibility. Student and stakeholder contributions from the spring school will be embedded, transforming academic debate into accessible, teaching-relevant content. This exhibition will serve as a sustainable research and teaching resource.

***Phase 1**: Online Lecture Series – Critical Heritage Studies at Arqus: Concepts, Approaches and Findings (winter term 2025/26)*

- Format: Cross-disciplinary Seminars/Online lecture series
- Number of participants: 869
- Fields: Critical Heritage Studies; European Studies
- Target audience: students, PhDs, Postdocs, academics, citizens
- Lecture series: https://www.youtube.com/playlist?list=PLxVM1tcZ7t1YaJBD2Zv_LWwvWNaq-0BGc

The notion of Europe and the European project are closely linked to the creation, preservation and debate surrounding its cultural heritage. Since the 19th century, heritage has played a pivotal role in shaping European nations, becoming crucial to the foundation of the European integration project after the Second World War.

Today, heritage studies bring together a wide range of disciplines, including anthropology, archaeology, archival science, library science and museum studies, among others. This multidisciplinary approach to research and teaching has resulted in a wide variety of heritage definitions.

Nevertheless, the concept of cultural heritage can't be defined solely by material objects such as paintings; it extends beyond the tangible, encompassing oral traditions, artistic expressions, ceremonial practices, cultural landscapes and natural sites. All of which shape collective memory and identity and contribute to the continuous construction of Europe.

However, the general understanding of heritage has become more complicated in recent decades due to post-colonial debates, political transitions and social transformation, as well as the rise of populist nationalism across Europe and the implications of the digital revolution and climate change.

To address this issue, Arqus has launched the "Critical heritage studies at Arqus: Concepts, approaches and findings" series of online lectures, reflecting on cultural heritage from a variety of perspectives to create a starting point for the mapping and further development of Arqus contribution to critical heritage studies.

Content: lecture series on Baltic Modernism, Digitalisation of Cultural Heritage, Landscape and Heritage, Neglected Heritage, Fascist Legacies, Heritage and Humiliation, European History and Ethics of Representation.

Website: https://arqus-alliance.eu/news/arqus-webinar-series-critical-heritage-studies-arqus-concepts-approaches-findings/

***Phase 2:*** *Spring School – Dissonant heritage, Contested Landscapes and European Identity (5 days)*

- Format: summer school (with blended elements)
- Number of participants: 30
- Fields: Critical Heritage Studies; European Studies
- Target audience: students, PhDs

The Spring School took place at Vilnius University and brought together thirty master's and doctoral students from six Arqus partner universities to explore how Europe's contested histories are reflected in its landscapes and influence contemporary European identity. The programme combined seminars and fieldwork, using Vilnius as a case study for examining the complexities of cultural memory shaped by the Holocaust and socialist rule.

Participants engaged in thematic sessions on dissonant heritage in universities, socialist architecture and post-Holocaust landscapes, complemented by site visits to significant locations in and around Vilnius. The event fostered critical dialogue among students from diverse disciplines and backgrounds, highlighting the value of interdisciplinary and comparative perspectives within the Arqus Alliance.

Building on the insights gained, the Alliance plans to develop further joint teaching formats on cultural heritage, recognising that the exploration of Europe's layered past is an ongoing process.

Activities: keynote lectures, fieldwork sites and fieldwork trips, group work, workshops, roundtables.

Website: https://arqus-alliance.eu/news/heritage-landscape-identity-arqus-students-explore-europes-contested-pasts-vilnius/

***Phase 3****: Digital Exhibition – "Art, Memory and Critical Responsibility"*

The results of the summer school will subsequently be incorporated into the project of a digital exhibition on Palazzo Liviano in Padua. This exhibition is dedicated to research results and debates about art, memory and critical responsibility and may form the basis for future teaching. At the same time, students' participation and reflections during the spring school on "Dissonant Heritage" will be included as research activity into the digital exhibition.

Accordingly, the CBL will find a comprehensive conclusion through a dynamic digital exhibition, as students, PhD candidates and others will have access to practical outcomes of the academic debate. Furthermore, the combination of lecture series and digital exhibition stakeholder engagement will be integrated and OER will be available for teaching and learning in the field of heritage studies.

Objective: To create a sustainable, inclusive and accessible digital platform that preserves and shares the program's research, reflections and creative outputs.

Features: Interactive maps of dissonant heritage sites with multimedia content (audio interviews, photographs, student essays), Thematic galleries, Open-access educational resources (lesson plans, discussion guides)

- Format: digital exhibition
- Number of participants: n/a
- Fields: Critical Heritage Studies; European Studies
- Target audience: students, PhDs, researcher, academics, citizens, civil society institutions, political organisations

### European Studies in a World in Flux: Perspectives from Employers and Stakeholders (2024)

- Format: Thinkathon; hybrid
- Number of participants: 48
- Fields: European Studies; Global Studies
- Target audience: students; PhDs; academics; professionals; external stakeholders

The event brought together experts, potential future employers and stakeholders for whom the graduates of the transnational master's programme in European Studies and similar programs might be interesting partners. At the roundtable, participants reflected on the challenges in European politics, culture, business and academia that they see emerging in the face of the (recent) dramatic transformations in European and global contexts. Economic crises, climate change, warfare, the rise of populist and authoritarian politics and the fragility of the international order have variable and specific effects on different sectors of European societies. The discussion mapped the variable concerns and highlighted potential strategies to cope with them from professionals' perspectives. This included their expectation from universities, scholars and students and the role that would have to play.

Website: https://arqus-alliance.eu/event/roundtable-and-thinkaton-leipzig-university-european-studies-world-flux/

### What skills do students need in a fast-changing world (2025)

- Format: Thinkathon; hybrid
- Number of participants: 48
- Fields: European Studies; Global Studies
- Target audience: students; PhDs

During the Arqus Thinkathon at the Global and European Studies Institute at Leipzig University, students of social sciences and humanities discussed key skills for future graduates with experts from academia, politics and international organisations. The aim of the event was to reflect on current challenges, sharpen career prospects and strengthen networks. The Arqus Thinkathon in Leipzig clearly demonstrated the skills that students need to develop today: intercultural, communicative and strategic skills, as well as interdisciplinary thinking and creative drive. The event also highlighted how Arqus universities combine national perspectives with the strategic requirements of the EU and prepare students specifically for Europe's role as a global player.

Website: https://arqus-alliance.eu/news/arqus-thinkathon-what-skills-do-students-need-in-a-fast-changing-world/

## Impact & Outcomes

### General Aspects

The transdisciplinary innovation activities in the Arqus Living Lab cluster "European Identity & Heritage" have generated profound and far-reaching impacts across academic, societal and educational domains. By integrating challenge-based learning with critical heritage studies, the Living Lab has fostered transformative learning experiences that transcend disciplinary boundaries, equipping students and scholars with the analytical, ethical and collaborative tools necessary to engage with Europe's contested pasts. The programme's phased approach—beginning with a widely accessible online lecture series reaching over 800 participants, advancing through an immersive spring school in Vilnius that brought together master's and PhD students from across the Arqus Alliance and culminating in a dynamic digital

exhibition at Padua's Palazzo Liviano—has created a sustainable ecosystem of knowledge production and dissemination. The online lecture series and the digital exhibition, enriched by student research, multimedia content and stakeholder contributions, serves not only as a public-facing platform for critical dialogue on memory, identity and responsibility but also as an open educational resource (OER) that supports future teaching and learning across disciplines and universities. The programme's transdisciplinary nature—bridging history, art, ethics, digital humanities and European studies—has strengthened institutional collaboration within Arqus, while its engagement with civil society, policymakers and employers through events like the Thinkathons has ensured relevance beyond academia. Ultimately, the Dissonant Heritage initiative exemplifies how transdisciplinary innovation can address complex societal challenges by transforming academic inquiry into actionable, inclusive and enduring public knowledge, contributing meaningfully to the ongoing construction of a more reflective, responsible and pluralistic European identity.

## Impact Story

### *Challenge-Based Learning (CBL) programme "Dissonant Heritage"*

The Challenge-Based Learning (CBL) Programme on "Dissonant Heritage" delivered transdisciplinary innovative activities and institutional impacts across the Arqus network. The programme, combining an online lecture series (120 participants) and an intensive five-day Spring School (30 interdisciplinary students from five universities), successfully fostered deep, critical engagement with contested heritage through interdisciplinary, experiential and collaborative learning.

Key impacts have enhanced learning and skills: Participants developed critical analytical tools, ethical awareness and intercultural collaboration skills by exploring complex themes such as fascist legacies, marginalised histories and heritage-related trauma. The online phase broadened perspectives on heritage as a dynamic, contested field requiring interdisciplinary approaches.

Furthermore, the Spring School enabled hands-on exploration of dissonant heritage sites through fieldwork, workshops and peer collaboration, deepening students' understanding of the socio-political dimensions of memory and identity.

The final digital exhibition "Art, Memory and Critical Responsibility" serves as a lasting, inclusive, multilingual platform featuring interactive maps, multimedia content, thematic galleries and open-access educational resources, ensuring long-term accessibility and reuse and demonstrates the sustainable output of the CBL.

Additionally, partnerships with local heritage actors have paved the way for follow-up initiatives, including community-led walking tours, podcasts and participatory art projects, extending the programme's reach beyond academia, which shows the impact of the Living Lab on community & public engagement.

In conclusion, the CBL programme exemplifies how challenge-based learning can bridge academic inquiry, ethical responsibility and public engagement. By transforming individual learning experiences and producing a living digital resource, it advances critical heritage studies as a dynamic, inclusive and socially relevant field—ensuring that Europe's dissonant pasts are not only remembered, but critically examined, shared and reimagined for future generations.

## Strengths & Weaknesses

The Arqus Alliance has already demonstrated substantial progress in fostering transdisciplinary innovation, as demonstrated by the diverse and impactful initiatives across its partner universities. The Clusters have succeeded in establishing a diverse portfolio of initiatives that foster collaboration across partner universities and disciplines. The initiatives reflect the Alliance's strong commitment to experimentation and the development of new formats, such as challenge-based programmes and lecture series, which have engaged both academic and societal partners. The use of digital tools and platforms has facilitated cross-border cooperation and broadened participation. Furthermore, the Alliance's focus on societal relevance and the integration of practice partners has ensured that many initiatives have tangible impact beyond academia. With these initiatives Arqus demonstrates a dynamic and responsive approach, making an important contribution to transdisciplinary innovation and meeting its ambitions within the European higher education landscape.

At the same time, an in depth analysis highlights further potential for development – particularly in deepening cooperation across thematic areas, creating more sustainable and recognised learning opportunities, making better use of digital resources and ensuring that all activities are inclusive and closely connected to real-world partners. By building on these strengths and addressing these areas, Arqus can further enhance its effectiveness and long-term impact.

## Proposals for Further Improvement & Enhancement

1. **Enhancing Inter-Cluster Collaboration**
   Collaboration between Arqus clusters should be intensified to foster synergies and cross-disciplinary innovation. Structured joint activities, regular exchanges and shared projects would enable clusters to leverage each other's expertise and maximise the overall impact of the Alliance.
2. **Long-term Institutionalisation of Successful Formats**
   Several initiatives demonstrate the effectiveness of pilot projects and temporary formats. Particularly impactful models (e.g., Lecture Series, Challenge-Based Programmes) should be considered for permanent integration into the structures of the Alliance.
3. **Leveraging Existing Initiatives for Structured Micro-Credential Development**
   Existing certificates for initiatives and ongoing efforts to develop joint micro-credentials within Arqus provide a strong foundation. The initiatives should be more systematically used as starting points for further micro-credential development, enabling more structured and widely recognised offerings across the Alliance.
4. **Increasing Use of Digital Tools for Co-Creation and Innovation**
   Given the focus on digital transformation, the development and use of innovative digital tools (for example, virtual hackathons, digital ideation processes, or collaborative project development) could further facilitate cooperation within the whole Alliance and attract new target groups.
5. **Increasing Utilisation of Arqus Digital Infrastructure**
   The use of Arqus digital platforms and tools should be further promoted and integrated into all initiatives. This would streamline collaboration, enable broader engagement, facilitate knowledge transfer and maximise the impact of the initiatives.
6. **Stronger Integration of Practice Partners**
   Involving practice partners (such as companies, NGOs and public administrations) more deeply in the initiatives could further strengthen the application orientation and societal transfer of the initiatives.

7. **Further Strengthening Inclusion and Diversity**
   While there are already efforts within the Alliance to promote inclusion and diversity, these aspects should be even more systematically integrated. Targeted measures and regular evaluation are needed to ensure that activities are accessible, representative and inclusive of diverse perspectives and participants.

## CONCLUDING REMARKS

The Joint Final Report on Transdisciplinary Innovation Activities offers a comprehensive account of the Arqus Alliance's progress in advancing its strategic objectives through a wide range of collaborative initiatives. The activities described have made a significant and lasting contribution to the project objectives, reinforced the Alliance's role as a driver of educational and societal transformation and provided valuable models and resources for the ongoing development of the European Higher Education Area. The Living Lab approach has proven particularly effective in bridging disciplines, institutions and societal sectors, ensuring that higher education remains responsive, inclusive and impactful in addressing Europe's most pressing challenges.

### Contribution to Project Objectives

Throughout the clusters Climate Change & Sustainable Development, Artificial Intelligence & Digital Transformation and European Identity & Heritage the Alliance has successfully bridged research, education and societal engagement. Activities such as challenge-based learning programmes, international seminars, hackathons and digital exhibitions have integrated academic learning with real-world problem-solving and stakeholder involvement, fostering innovation and co-creation across disciplines. The implementation of the Living Lab model has been particularly effective, enabling the co-creation of knowledge and solutions through interdisciplinary teamwork and hands-on projects, while actively involving external partners. This approach has enhanced mobility and collaboration, leading to increased student and staff exchanges, the formation of international research networks and the development of joint educational resources.

### Impact on the Arqus Alliance

As a result, the Alliance has strengthened institutional cooperation and built durable networks among partner universities and stakeholders. It has also promoted inclusion and diversity through initiatives like the Human Chapters, which have fostered intercultural dialogue and made engagement more accessible. Moreover, the open dissemination of resources, public events and digital platforms has increased the visibility and influence of Arqus, establishing it as a recognised actor in transdisciplinary and societal engagement.

### Contribution to the European Higher Education Area (EHEA)

These achievements resonate strongly with the priorities of the European Higher Education Area. The adoption of challenge-based and cross-disciplinary learning formats serves as a model for modern, student-centred education. The activities have promoted essential competences such as digital literacy, intercultural skills and critical thinking, while the creation of open educational resources and collaborative research outputs supports the EHEA's goals of openness, mobility and societal relevance.

---

The Arqus European University Alliance is co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EACEA. Neither the European Union nor the granting authority can be held responsible for them.