

SOI-175

Challenge: Alternatives to animal-based scientific research

*Pioneering new types of research towards better health***Challenge Provider:** EIC Pathfinder Bio-HhOST**Hosting Institution**Università di Trento, [School of Innovation \(SOI\)](#)**Study Format:** Blended. International students can ask their home International Office for Short Term Mobility scholarships to participate in the in-presence week in Trento..**Who can apply:** Students from all disciplines**Study period:** 19 October - 06 November

In presence: 02-06 November 2026 in Trento

Calendar of activities

17.00-18.30	Mon	19/10	Kick-off Challenge (ONLINE)
17.00-18.30	Mon	26/10	Training on synthetic biology (ONLINE)
17.00-18.30	Tue	27/10	Training on entrepreneurship (ONLINE)
14.30-17.00	Mon	2/11	Welcome to Trento and City and University Tour (SOI)
9.00-18.00	Tue	3/11	Lab visit, Team building and Co-creation phase (POVO)
9.00-18.00	Wed	4/11	Solution design (SOI)
9.00-18.00	Thu	5/11	Business Modelling and pitch (SOI)
9.00-18.00	Fri	6/11	Final pitch and Conclusions (SOI)

Learning Outcomes

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Understand the current state of the art with the use of animal models in scientific research, its benefits and limitations.

- Challenge the current state of the art in new and creative ways
- Work effectively in multidisciplinary and multinational teams
- Co-create solutions and design a business model
- Learn to implement sound solutions that are meaningful for the challenge provider

The Challenge - Description

Are you ready to shape the future of research while championing ethical, cutting-edge science? The ECIU Challenge "Alternatives to animal-based scientific research" invites forward-thinking students from all academic backgrounds to tackle one of the most pressing dilemmas in modern science: pioneering new research methodologies that maximize health outcomes—such as advanced diagnoses and treatments—while phasing out dependency on laboratory animals.

This 3-ECTS blended learning opportunity bridges the gap between synthetic biology, ethics, and entrepreneurship. You will start with interactive online training sessions in October, followed by an intensive, fully immersive week in Trento this November. There, you will explore state-of-the-art university labs, collaborate in multidisciplinary, international teams, and co-create viable, real-world solutions.

New scientific models are being developed to maximize better health outcomes, including new medicines, diagnoses, and medical interventions. Traditionally, this research included and is dependent upon using laboratory animals as a necessary step in the development of new treatments. The goal of this challenge is to innovate ways to develop better medicines and treatments, avoiding the complete use of laboratory animals. This has both scientific and ethical considerations that will be explored.

Information

The challenge will follow a blended format, combining both online and in-person activities. It will kick off with an online introductory session, where participants will have the opportunity to meet each other and receive detailed information about the challenge. They will attend online mentorship sessions and specific lectures on synthetic biology and entrepreneurship. This will be followed by an in-person week from November 2nd to November 6th, held at the School of Innovation, University of

Trento, and at the UniTrento Labs in Povo. During this week, students will attend sessions focused on co-creating solutions, designing a business model, and preparing a pitch. This phase will be supported by mentoring sessions with both the challenge provider and university staff from the University of Trento. The challenge will conclude with a final presentation, where students will pitch their solutions. Assessment is based on a pass/fail system, evaluated by university staff. Additionally, the most convincing proposal will be selected by the challenge provider and a panel of experts.

Teamwork will be evaluated in terms of 5 criteria:

- **INNOVATIVITY OF THE SOLUTION/CREATIVE SOLUTION:** The process of introducing new ideas, services, technologies, products, or methodologies, or improving existing ones.
- **ECONOMIC FEASIBILITY:** The solution presents characteristics that make it economically feasible, taking into account both costs and revenues in the short/medium/long term.
- **SCALABILITY OF THE SOLUTION:** the ability of a solution to increase or decrease the power to deliver the service for which it is intended, according to need and/or availability.
- **SOCIAL IMPACT:** Demonstrating a measurable and lasting improvement for people, planet, and prosperity. *prosperity - economically and socially satisfying lives.'
- **PITCH QUALITY:** oral presentation is clear, respects timing, and is convincing. The presentation is graphically appealing.

Why should you apply?

- **Drive Real Impact:** Develop solutions that directly influence the planet, human health, and ethical scientific progress.
- **Boost Your Entrepreneurial Skills:** Learn to design a sustainable business model and master the art of the pitch.
- **Win Special Prizes:** The challenge provider and a panel of experts will award a special prize to the most innovative and economically feasible proposal.
- **Global Networking:** Connect with top-tier academic facilitators, industry experts, and peers from across Europe.

Don't miss the chance to turn your innovative ideas into high-impact reality!

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