Structure

Tri-City Hackathon: Building Cities for Health, Comfort and a Low-Carbon Future

1. Event Overview

- **Organizing Partners:** Universidade de Lisboa (ULisboa), Universitat Politècnica de Catalunya · BarcelonaTECH (UPC), Wrocław University of Science and Technology (WroclawTech)
- **Format:** A **hybrid** event taking place simultaneously across three physical campus locations and one shared online platform.
- **Duration:** 48 hours total, spanning two business days, with approximately 24 hours of active hacking (no overnight sessions at the venues).

2. Participation and Teams

- **Target Capacity:** Approximately **120 participants** in total.
- **Distribution:** 30 physical participants per university site (90 total) plus 30 participants attending exclusively online.
- **Team Composition:** Teams must consist of **4 to 5 members**.
- **Eligibility:** Open to undergraduate, master's, and PhD students, as well as researchers, professionals, and members of the general society.

3. Thematic Structure

The hackathon focuses on creating healthier, more liveable and resilient, low-carbon cities through the integration of health, biotechnology, technology and citizen-centred design.

Tri-City Hackathon - Biotechnology & Health Innovation for Healthier, More Liveable and Resilient Cities:

Cities today face increasingly complex and interconnected challenges at the intersection of climate transition, health, environment, mobility, social cohesion and quality of life. Climate pressures are increasingly affecting citizens' wellbeing, while car-dominated infrastructure, fragmented public spaces, data overload and inequalities in access to healthy environments can make urban life less comfortable, connected and resilient. These challenges are particularly relevant for intermediate cities, which need solutions that are innovative and scientifically grounded, while remaining affordable, scalable and adapted to local contexts and resources.

The Tri-City Hackathon: Building Cities for Health, Comfort & a Low-Carbon Future responds to these challenges by creating a space for experimentation, collaboration and applied innovation. It explores how biotechnology, life sciences, health innovation, digital technologies, engineering and citizen-centred approaches can help transform the low-carbon transition into an opportunity to create cities that are healthier, more comfortable and more resilient. From biosensors and diagnostics to biomaterials, nutrition, environmental

biotechnology and digital health, the Hackathon invites participants to develop practical solutions that connect human health, environmental health and the future of urban living.

4. Objectives

- Identify a concrete problem aligned with one track (Day 1)
- Design a clear solution concept and basic implementation plan (Day1)
- Refine and Transform the solution concept into scalable, more robust solutions (Day 2)
- Prepare deliverables (Day 2)

5. Format

- Duration: 48 hours over 2 business days
  Hacking time: ~24 hours total (no overnight presence required at the venue; teams may continue working remotely)
- **Core Hours (e.g., 10:00–18:00 CET):** Mentors and organisers fully available; outside these hours, teams can work flexibly
- Delivery: hybrid (on-site with remote options); Online platform: Zoom + Discord / Slack (or equivalent)
- Team size - Encouraged to be 4 to 5, minimum 3 subject to the approval of organisers. Teamwork from different cities will be encouraged.

6. Deliverables

Each team must submit:

1. **Pitch Deck** (slides)
2. **Demo or MVP** (prototype, simulation, UI mock-up, or similar)
3. **Teaser Video (max 30 seconds)** – a concise video introducing the core idea
4. Optional:
    - Code repository link or prototype demo
    - Supporting documents (data, diagrams, business model sketches)

All deliverables are due before the final pitch session, at the local submission deadline.