

# Life Science Open Hub: an exploratory study on Open Innovation Platforms, Labs and Ecosystems



T-FACTOR HAS RECEIVED FUNDING UNDER HORIZON 2020  
RESEARCH & INNOVATION PROGRAMME  
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Bilbao, June 2022



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# T-FACTOR

## PARTICIPATORY FUTURES REGENERATING CITIES WITH TEMPORARY USES

T-Factor is a Horizon 2020 Innovation Action dedicated to the topic of **temporary or meanwhile uses** in urban regeneration. In the project, we argue that the time factor in urban regeneration can become a **strategic asset** when it is used as a means of collective placemaking in light of stable uses and functions. It includes all stakeholders such as governments, developers, academia, business, grassroots communities and citizens. Our mission is to build a full portfolio of tested innovations embracing design, organisation, management, governance, funding and regulatory aspects of temporary spaces, so as to contribute to unlock their **transformative potential** toward inclusive, sustainable and thriving cities. We work across different regeneration initiatives in Europe and beyond - both advanced and at early stages, developing an international platform of **citymaking** support, mentoring and knowledge exchange in this emerging field.

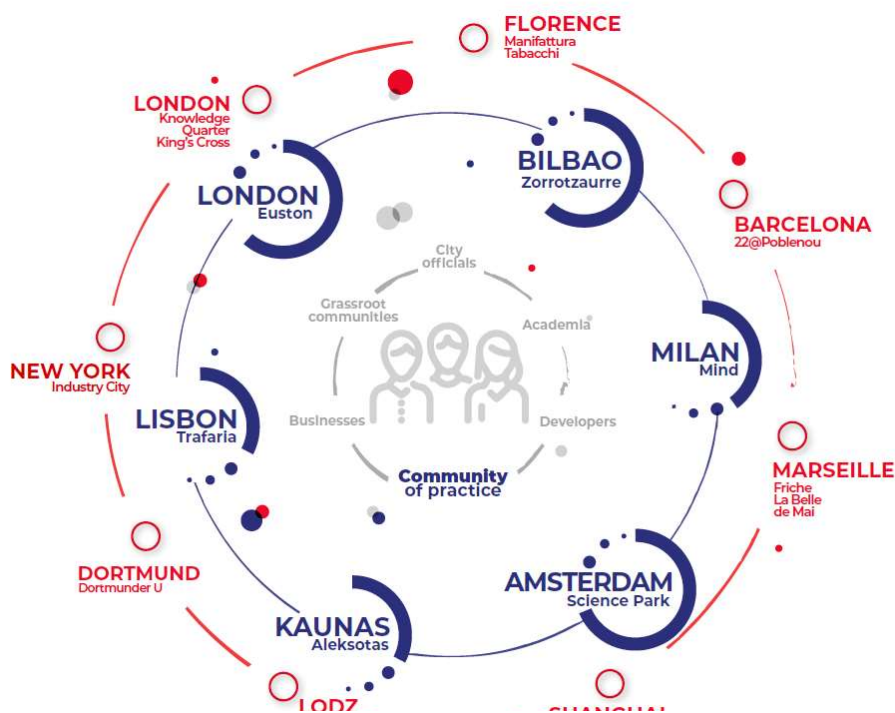


Figure 1. T-Factor Pilots (Blue) | T-Factor Advanced Case Studies (Red)

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# About the Document

The T-Factor consortium supports the emergence of temporary initiatives in the 'meanwhile' of urban developments. Often, these initiatives are key to build shared public value and rewire the social, cultural and economic fabrics of the areas under regeneration.

The vision of facilitating progressive, participatory, and citizen-driven urban regeneration processes will be realised by six Pilot cities across Europe and with support from seven thematic Transformations-Labs (T-Labs).

**T-Labs** are framed as knowledge clusters, where different project partners work together on specific themes such as:

- T-Lab 1 - Arts, Culture & Creativity
- T-Lab 2 - Urban Production and Digitalisation
- T-Lab 3 - Citizens-led Smartness
- T-Lab 4 - Urban Design for Sociality and Wellbeing
- T-Lab 5 - Circular and Collaborative Economy
- T-Lab 6 - Social Innovation and Social Inclusion
- T-Lab 7 - Urban Climate Change

With a rich mix of theoretical and practical knowledge, the **T-Labs** in T-Factor support Pilot activities throughout Europe to prototype participatory urban futures. They help to support new urban regeneration models and tools to keep pace with complexity, rapid change, and emerging needs in neighbourhoods and communities.

This report is the result of a T-Lab activity within **T-Lab 2: Urban Production and Digitisation** led by partners from TECNALIA, Spain. It presents an explorative case study collection about gaining knowledge and a better understanding of how to design and implement an Open Innovation ecosystem in Life Science in MIND (Milan one of the pilot sites of the T-Factor project), that will be sustainable over time, understand how it is managed and financed, learn what kinds of initiatives and activities foster collaboration and attract the interest of stakeholders.

# Introduction

The aim of the report is to support the design of a Life Science Open Lab in MIND by bringing together the interests of all Local Coalition Members and analysing best practices around Europe on Open Innovation Ecosystems in health/healthcare, life science, biology and bio-hacking, neuroscience.... To this end 10 cases will be analysed, focusing on thematic impact, stakeholder engagement, business model, openness, type of projects and partnership aspects.

After the initial analysis a selection/prioritization of 3/4 cases will be done by the Local Coalition in order to conduct deeper interviews with selected cases.

## Context of MIND and the Mission(s)

MIND is located in a suburban environment at the north-west periphery, right on the border delimited by Milan's outer ring road and connected to the city centre by tube and train. It is also located at the convergence of two main typologies of suburban space, namely small sized urban sprawls and a formerly industrialised area, which has undergone a process of deindustrialisation and is now looking for a new identity. The regeneration project foresees the development of 480,000 sqm of public uses: · students' accommodation, social housing and leisure, sports and cultural activities; · 205,000 sqm will host the Public Anchors headquarters: The Galeazzi research hospital will be completed by 2022, and will host around 9,000 staff, mainly dedicated to orthopaedics and cardiology. The Human Technopole, an international Hub connecting Universities, Research Institutes and Hospitals to develop personalized medicine and nutrition to tackle cancer and neurodegenerative diseases by means of genomics, big data analysis, will host 1,000 researchers and 500 administrative and technical staff. The scientific campus of the University of Milan Statale will host around 18,000 students and 2,000 staff. 480,000 sqm of private uses: commercial uses and offices, residential, retail, light industry and hospitality, a hotel, labs, culture and sport-related uses. At completion, in 2031 the district will host around 60,000 people a day. MIND aims to be an engine of economic and technological growth as well as of inclusion and sustainability, to increase the well-being of both people and the planet by leveraging on a critical mass of public and private stakeholders committed to advance research and accelerate innovation by working together, pairing world-class know-how in specialized, high growth potential areas and an open-innovation, cross-sectoral, multi-disciplinary approach.



## Description of Life Science Open Hub

Life Science Open Hub (LSOH) consists of a hybrid experience. Art and Science meet to create an immersive experience aimed at educating and thrilling the visitor. LSOH is a space tailored for universities, organisations, and companies who desire to display their latest high-technological products, innovative prototypes and tools for healthcare and personalised medicine via a totalising immersive experience which is both a scientific museum and an art exhibition.

Initially, in the short term, the function of the Life Science Open Hub will be primarily to disseminate scientific and industrial knowledge and know-how transversally involving different target groups (e.g. young students, residents, surgeons and medical researchers, industry 4.0).

The Life Science Open Hub is made possible thanks to a multifunctional temporary space located in MIND. Its role is showcasing prototypes, products and high-level technologies with a mixed approach that merges scientific and industrial approach with art & culture, allowing visitors to perceive the beauty and fascination of scientific knowledge and research and reflecting on their role in humans' life.



The Hub will kick off by exhibiting PRINTMED-3D, an industrial project funded by Lombardy Region and led by the University of Milan (Physics Department and Faculty of Medicine and Surgery). The project points at the development of enabling technological solutions for personalized medicine, surgical simulation and specialist training, by combining the use of mixed virtual reality and 3D physical haptic models of organs and anatomical parts.



While initially, the space will be mainly dedicated to dissemination and training, testing the immersive exhibit format, in March - June 2023 the Life Science Open Hub will offer the possibility to companies of the MIND ecosystem to organise their own events - presenting their products - or organising talks and workshops, as well as to third-part companies operating in the manufacturing and medical sector.

There is already an existing Life Science ecosystem in Lombardia, an extensive network of research-intensive companies, multinationals, SMEs, startups, top international researchers, professors, doctors, and patients for experimenting and testing with the outcomes of research products and it will be crucial to engage with these stakeholders.



## The role of Open Innovation Platforms and Ecosystems on common value creation and technological innovation

Open Innovation is often seen as a kind of socio-technical system in their environment (Hallerstede 2013) (with budget constraints, their specific legislation, etc.) where the users or actors collaborate voluntarily in order to develop innovations (very much inline with Erik Von Hyppels approach), and it is precisely this approach that we should focus on in the case of LSOH.

The main potential of these ecosystems is to engage actors voluntarily in order to find a common good that benefits not only them as individual actors but also the community to which they belong, It's because of this that LSOH must be perfectly integrated and aligned with MIND's overall strategy, to carry out actions and activities to identify the needs and strategies of MIND tenants in terms of innovation. LSOH has to be seen as another MIND service so that tenants know that in LSOH they have an ally to innovate in an open and collaborative way with the rest of the tenants.

It is known that two of the critical aspects of open innovation are the attraction of innovators and community management (Donaldsiegelasuedu and Kenney 2018), and this is where LSOH has to become strong and be seen as the agent that brings together and manages this community.

## Life Science Open Hub and its approach to Open Innovation

What do we mean with “Open”?

Initially, at a first stage, the Hub will be focused very much on Open Science: Widening the outcomes of the research activities to a wider audience, involving citizens in dissemination activities and reaching out to vulnerable groups. This is the HUB approach more closely linked to Responsible Research and Innovation<sup>1</sup>, making science transparent and accessible, better preparing future researchers and other social actors and including civil society organisations in the R&I process.

The Life Science Open Hub will take advantage of the already identified opportunity in previous deliverables of T-Factor, the so called “Opportunity 4” : “Research & Innovation Dissemination and Citizens Science initiatives Ahead-of-the-times research, innovation and experimentation will characterise MIND before the completion of the regeneration project. For the developer as well as for the anchors and tenants it is imperative that the knowledge and expertise produced in MIND becomes accessible to the wider public, which includes policymakers. This offers unique opportunities to develop ways to not only share content but to design tools and approaches to establish a dialogue to inform, co-create and share knowledge”.

The Hub will also address two needs identified in MIND, as for example: Meanwhile Uses to Include Different Target Audiences. “MIND needs to become a destination not only

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<sup>1</sup> [https://tetrris.eu/what-is-responsible-research-and-innovation-rrri/#:~:text=Responsible%20Research%20%26%20Innovation%20\(RRI\)%20is%20an%20approach%20to%20research,to%20make%20inclusive%20and%20sustainable.](https://tetrris.eu/what-is-responsible-research-and-innovation-rrri/#:~:text=Responsible%20Research%20%26%20Innovation%20(RRI)%20is%20an%20approach%20to%20research,to%20make%20inclusive%20and%20sustainable.)

for high-specialised researchers and big companies, but also and especially for the larger community starting from the immediate surroundings. There is a need to engage more diverse actors in order to gain an understanding of how they see value in the project. There is a need to understand what different groups would want to see in terms of activating the area – not only in terms of green and open spaces for sports or outdoor educational activities, but also looking ahead at ways to collaborate and start a dialogue with the network of actors that would populate MIND”.

The second need LSOH will address is that one aiming at reducing distance between University / Private Sector / Decision-makers / Civil Society. “There is the need to create a common ground between the research and private sector, the decision-makers and the civil society. MIND could offer the perfect setting to explore new ways to collaborate as well as matching bottom-up capacity building.”

In addition to the open approach in terms of Open Science and dissemination, in a second step, LSOH has to have an Open strategy also in terms of Open Innovation, as we have discussed in previous sections and will discuss in the final Recommendations section, and this Open Innovation strategy has to help the space to be sustainable in itself and has to be perfectly integrated and aligned with the MIND strategy as a whole.

We can therefore conclude that the Hub's approach and focus will be very much in line with both the needs and opportunities already identified and will respond to a coherent and meaningful plan for the MIND community.

## Case Study Design

This case study report is an explorative study about Open Innovation Platforms and Ecosystems aiming at open, share and disseminate research and technological outcomes and building trustworthy and sustainable ecosystems of innovation. The selection of case studies for this report focuses on spaces, networks or centres that have a special focus on the dissemination of scientific activities, that merge aspects of science, art and culture and/or that carry out Open Innovation activities based on training and dissemination to capture the attention of Stakeholders and generate community. The selected cases cover a broad variety of organisational and legal models and they also vary in terms of mission, tasks and activities.

Each case comprises a brief description about...

### 1. Purpose and mission

- What is the purpose and mission of the Open Innovation Ecosystem/Platform/Hub?

### 2. Organisational model and legal status

- What is the organisational and legal model of the case (public, non-profit, for-profit, association, network etc.)?
- What are the legal articles of association (if there are any)/legal statute?
- What kind of regulation applies?

### 3. Stakeholders

- How many actors are involved?
- What kind of actors are involved?
- What is the role for each of the actors involved?
- How the relation among the actors is managed?

### 4. Operation & tasks

- Who/which organisation is steering the case?/ What are the activities of the steering actor?
  - How is the case operated on a daily basis?
  - Which tools are used to carry out the mission?
  - Are results assessed?
- 5. Activities and Outcomes**
- What kind of activities are organised and supported by the ecosystem/platform/hub/?
  - Is the dissemination and education a central part of the activities?
  - Is innovation emerging through ecosystem collaboration?
  - How is the IPR managed?
  - How dissemination of the outputs is managed? (with external community)
- 6. Funding**
- How is it financed?
  - Did the funding structure change over time?
  - Where do the funds come from to finance the laboratory (physical space)?
- 7. Challenges and Opportunities**
- What are the main challenges?
  - What are the main chances and opportunities?

For this explorative study only publicly available documents and website content of the organisations was used as a data source. Additionally, reports and research papers were used to deploy information. Where no information was found this is indicated with “This information is not publicly available”.

It is worth mentioning also that, following indications from the local coalition itself, although the initial idea is to launch the initiative with an exhibition of the resulting assets in research projects such as Printmed3D, and therefore case studies have been selected with 1) a high component of open innovation and, above all, 2) a strong focus on scientific dissemination and popularisation, these case studies also include initiatives that have little to do with dissemination and exhibition work but which have a significant Life Science component. This means that we are comparing quite disparate initiatives or organisations and that the conclusions in terms of opportunities and business models are not applicable to all the initiatives studied.



# CASE STUDIES

# InnoLab Bilbao (Bilbao, Spain)

**Location:** Bilbao City Center, Edificio Ensanche, Zabalgune Plaza, 11, 48009 Bilbao  
**Foundation Year:** 2016

**Website:** <https://www.ilb.eus/en/>

**About:** Open innovation platform connecting business and technology to find digital solutions to today's business and social challenges.

## 1. Purpose and mission

Is an Open innovation platform that connects businesses and technology in order to look for digital solutions to current business and social challenges. The platform is specialized in Artificial Intelligence and Data Analytics.

INNOLAB BILBAO, a private initiative with public support (Municipality of Bilbao), is an open innovation space where talent and technology come together to find new and innovative solutions to current challenges.

Innolab Bilbao creates **a network between the different agents that form part of the entrepreneurial ecosystem:** start-ups, SMEs, corporations, universities and technology centres, among others.

Their partners and collaborators offer their technology, knowledge and capabilities with the aim of making the prototyping stage prior to the commercial exploitation phase more efficient.

## 2. Organisational model and legal statute

Private company partially funded and promoted by the Municipality of Bilbao in 2016.

From a legal perspective, it's private non-profit association<sup>2</sup>.

The management of the Organization and its technical office is subcontracted to a Tech Venture Consultancy Agency, Hasten Ventures (<http://www.hasten.es/>)<sup>3</sup>.

## 3. Stakeholders

Partners signing a Collaboration Agreement:

BBK, IBM, Corporación Mondragón, Iberdrola, Universidad de Deusto, Euskaltel, Tecnalia, IMQ, Inkolan, Basque Center for Applied Mathematics, El Correo

Public-private collaboration between all stakeholders in the territory is key: large corporations, start-ups, universities, technology centres, clusters and companies.

## 4. Operation & tasks

As mentioned above, the management of the organization and the technical office is subcontracted to a Tech Ventures Consultancy organization, Hasten Ventures.

Hasten Ventures is responsible for managing the technical office of INNOLAB Bilbao, defining and executing the activity plan, managing the startup incubator space and coordinating the different actors and partners, among others.

In Open Innovation projects, Innolab Bilbao promotes and manages the projects that are owned by the partners.

<sup>2</sup> <https://www.bilbaoekintza.eus/proyecto/innolab-bilbao>

<sup>3</sup> <https://www.elcorreo.com/bizkaia/innolab-plataforma-innovacion-20200331132436-nt.html>

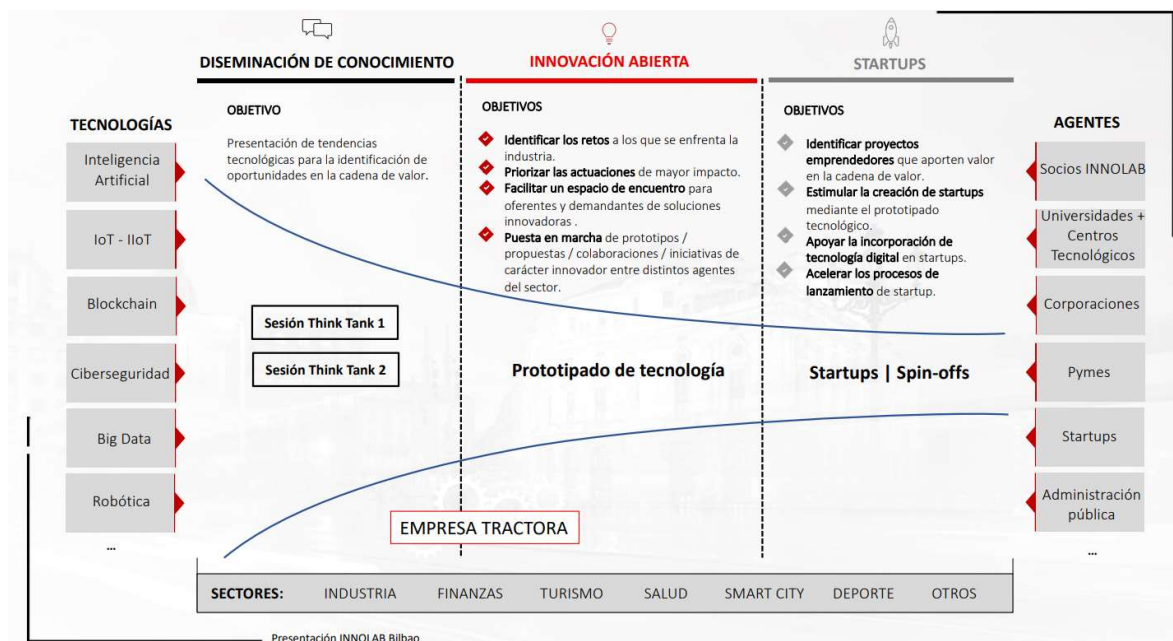
## 5. Activities and Outcomes

Lines of activity:

- **Dissemination of knowledge:** they make specific applications of technologies available to the general public to solve business and social problems through conferences, Think Tanks, Hackathons, or workshops.

- **Open innovation:** they respond to the technological needs of companies, promoting Open Innovation dynamics, identifying the main challenges faced by the industry.

- **Start-up acceleration:** they support the development and technological and commercial scaling through co-innovation with partners and large companies.



With a strong focus on **Dissemination**, they carry out this activity line with the aim of identifying technological trends that could lead to opportunities of innovation and collaboration in their ecosystem.

## 6. Funding

Despite being a non-profit organisation, so in Spain, the profits obtained at the end of the financial year must revert to the organisation itself, Innolab Bilbao offers a series of services to external companies (organisation of events and seminars, conferences or hackathons) and, in addition, to members who pay an annual fee, it offers innovation programmes (programming of challenges, identification of needs and opportunities, matchmaking between agents that offer technology and agents that demand it). It also offers acceleration and incubation services for Start-Ups, although this service does not seem to have much future in the organization<sup>4</sup>. The members or partners of the ecosystem can pay the fee with money or, instead, with commitment to participate for free in certain activities (conferences, workshops, training activities...).

<sup>4</sup> <https://gananzia.com/innolab-bilbao-cierra-su-incubadora-de-startups-y-se-centrara-en-deep-tech-y-mujeres-tecnologas>

## 7. Challenges and Opportunities

Opportunities: Open to an international scope, already attracting interest from international stakeholders. Strong technological (IT and Industry 4.0) ecosystem and most of them with R&I expertise.

**The main challenge seems to be the sustainability of the incubation programme**, as it seemed to be free for the start-ups participating in the programme. It looks like they will focus on acceleration programmes instead on the incubation ones.

## 8. References

<https://www.bilbaoekintza.eus/proyecto/innolab-bilbao>

<https://www.elcorreo.com/bizkaia/innolab-plataforma-innovacion-20200331132436-nt.html>

<https://gananzia.com/innolab-bilbao-cierra-su-incubadora-de-startups-y-se-centrara-en-deep-tech-y-mujeres-tecnologas>

# Associació Hac Te - Hub d'Art, Ciència i Tecnologia (Barcelona, Spain)

**Location:** It occupies one of the pavilions of the Fira de Montjuïc (Barcelona) concretely the Alfonso XIII Palace at the Fira. even though the official location of the initiative, they also carry out events and activities in other partners locations (Hangar, Universities Campus...)

**Website:** <https://hactebcn.org/es/>

**Foundation Year:** 2020

**About:** This is a cross-sector initiative under a joint-governance model, which has the support of institutions such as Barcelona City Council, the Government of Catalonia and the Barcelona Chamber of Commerce, whose aim is to explore and develop intersections between art, science and technology to boost the digital transformation of society.

## 1. Purpose and mission

HacTe BCN's mission is to create and manage the activities of **exploration and development of the intersections between art, design, science and technology** through the promotion of programmes, devices, processes, methods and structures in local, national and international connections.

Hac Te BCN is based on three pillars:

- A hybrid environment connecting knowledge and disciplines in art, science and technology
- The interconnection of academic fields and different actors involved in interdisciplinarity
- An open future for all society and a driver of digital transformation



## 2. Organisational model and legal statute

It is a transversal initiative (association), with a **joint governance model**, which has eleven founder partners. It is ruled by a General Assembly model that has a



president, a secretary and a treasurer and must have representation from each of the partners (founders or associates).

### **3. Stakeholders**

Institutions behind Hac Te BCN are: Universitat Oberta de Catalunya (UOC), Universitat Politècnica de Catalunya (UPC-Barcelona Tech), Institute of Photonic Sciences (ICFO), the Barcelona Supercomputing Center (BSC), the Barcelona Institute of Science and Technology (BIST), Barcelona Tech City, Hangar, the New Art Foundation, Fira de Barcelona, Sónar and Museu Nacional D'Art de Catalunya. They all are founding partners.

Hac Te BCN has recently joined the New European Bauhaus<sup>5</sup> that enables it to interact with European networks, associations and organisations that share the same values.

### **4. Operation & tasks**

The Hac Te BCN creates activities and the necessary collaborations to transfer artistic and technological knowledge to industry, to encourage and facilitate new business opportunities, and to consolidate the productive fabric.

To develop these programmes, the Hac Te BCN has a hybrid dimension, as it uses both virtual environments and existing physical spaces, such as creation centres, scientific infrastructures, research centres, companies and festivals and events on art, science and technology.

The initiative is quite new as it was officially established in November 2020.

At this point the focus is very much on granting projects and organising events, training and conferences.

### **5. Activities and Outcomes**

The Hac Te BCN fosters research, training, dissemination, transfer of knowledge and production programmes.

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<sup>5</sup> <https://hactebcn.org/es/actualitat-es/hacte-new-european-bauhaus/>



Among the outcomes from the activities they've carried out so far are:

- Production-research grants for the production and research of artistic pieces are in the realm of the confluence of art, science and technology
  - 5 research grants published so far<sup>6</sup>
- Projects funded by Hac Te
  - 5 micro-funding schemas for projects in the intersection of arts, science and technology have been granted so far<sup>7</sup>
- Dissemination and training: Organisation of workshops, conferences, talks and exhibitions
  - Co-organization of International Symposium on Electronic Arts (ISEA)<sup>8</sup>
  - Pecha kucha express on Art, science and technology<sup>9</sup>

## 6. Funding

The financial resources of the Association derive from:

- The **fees set by the General Assembly** for its members (established as monthly, quarterly, half-yearly fees, as well as extraordinary fees)
- Official or private subsidies, and **income from sponsorships**.
- Donations, inheritances or legacies.
- The income obtained from economic exploitations that the association develops.
- Income from the assets themselves or from other income that may be obtained.

<sup>6</sup> <https://hactebcn.org/actualitat/beques-isea2022-barcelona-en-suport-a-la-creacio-artistica/>

<sup>7</sup> <https://www.uoc.edu/portal/en/news/actualitat/2021/164-projects-art-science-technology-scholarships-ars-electronica-garden-barcelona.html>

<sup>8</sup> <https://isea2022.isea-international.org/>

<sup>9</sup> <https://hactebcn.org/activitats/pecha-kucha-express-art-ciencia-tecnologia/>

These two last points is quite probably that hasn't provided any incomes to Hac Te so far as their course is short and probably have not had time to develop assets or products to exploit.

Hac Te BCN also applies for public competitive funding in European R&I scheme, in that sense, the project hopes to receive financial support from the European Next Generation funds for economic reconstruction following the Covid-19 pandemic.

## 7. Challenges and Opportunities

**Opportunity:** Being Barcelona one of the main design and art hub in Europe it is definitely one big opportunity of the initiative to boost the content and community.

Hac Te BCN has faced a major challenge since its launch, which has been to initiate dissemination and awareness-raising activities during the pandemic period, trying to reach as many people as possible. So far, they seem to have captured the interest of the community and have scheduled numerous events.

The fact that the partnership has such a large number of members (11 to date) is both a risk and an opportunity.

A risk in terms of governing strategy and **aligning the interests of so many organisations in an assembly model**. This may lead to conflicts of interest between founding partners, which could have repercussions on the future of the association.

On the other hand, the very fact that there is such a large number of members means that in terms of the initiative's visibility, resources and content, there does not seem to be a shortage of content, stakeholders or resources. There is a signed contract, supported by local administrations and with large, committed entities that put their networks, knowledge and experience at the service of the initiative.

## 8. References

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# IBBTEC OPENLAB (Cantabria, Spain)

**Location:** Instituto de Biomedicina y Biotecnología de Cantabria. PCTCAN. Santander

Cantabria - Spain

**Website:** <https://web.unican.es/ibbtec/es-es/transfereencia/openlab>

**About:** The OpenLab is part of the Instituto de Biomedicina y Biotecnología de Cantabria's list of services.

## 1. Purpose and mission

IBBTEC's goal is cutting-edge **research** towards the advance of scientific knowledge and the development of **new technologies in life sciences**.

IBBTEC's MISSION is to **boost new scientific knowledge generation in biomedicine and biotechnology**, and to generate economic and social value due to **knowledge transfer and dissemination**.

Through their OpenLab they offer 300m<sup>2</sup> of infrastructure with pre-equipped biotechnology and biomedicine **laboratories, offices and meeting rooms**. They open annual calls to incubate projects in life-sciences.



## 2. Organisational model and legal statute

IBBTEC is a joint venture shared by CSIC<sup>10</sup>, Universidad de Cantabria and Cantabria's Government local development agency, SODERCAN. The Institute of Biomedicine and Biotechnology of Cantabria is governed by a governing committee, composed of representatives of CSIC, the University of Cantabria and Sodercan. The governing bodies are as follows:

- Governing Body
  - Governing Committee

<sup>10</sup> <https://www.csic.es/en>

- Management Bodies
  - Board
  - Direction
  - Vice-Direction
  - Management
- Advisory Bodies
  - Scientific Staff (Staff Researchers)
  - External Scientific Committee

### 3. Stakeholders

Its stakeholders include the Centro de Investigación Biomédica en Red (CIBER) de Salud Mental (CIBERSAM) and Oncology (CIBERONC); as well as the Cellmoves Network of Excellence (Thematic Network: Analysis of the Cellular Bases of Morphogenesis in Vertebrates). It also has among its stakeholders the Spanish Association Against Cancer and are members of the European Research Council. They also collaborate in numerous European projects and collaborations with private companies, although they do not provide information on the latter.



### 4. Operation & tasks

The Research is carried out by their own researchers in different specific fields such as Microbiology and Genomics or Cellular and Molecular Signalling. Apart from the Research, through its Bioincubator Business **OpenLab**, it offers its knowledge and capacities to institutions and companies to innovate. With the support of both the deputy vice president of Knowledge Transfer (VATC) of the CSIC and the Office of Transfer of research results (OTRI) of Universidad de Cantabria.

It's the OpenLab who is in charge of organising workshops, seminars and training pills<sup>11</sup>.

### 5. Activities and Outcomes

IBBTEC stands out as a scientific-technical platform. It has the most advanced technologies in molecular and cellular biology, such as: massive sequencing, bioinformatics, protein crystallography or microscopy, allowing the exhaustive analysis of genes and proteins focused on a multitude of biological problems. The Centre has more than 6,000m<sup>2</sup> of modern facilities, which include laboratories for radioactivity, microfluidics, cultures, biological containment histology level two (BSL-2), and biological containment animal experimentation level three (BSL-3), which is one of the few laboratories of its kind in operation in the country.

<sup>11</sup> <https://web.unican.es/ibbtec/es-es/transferencia/openlab/micropildoras-formativas>

On the other hand, IBBTEC houses a **Bio-incubator for technology-based companies (EBTs)**, which aims to become a benchmark for the **attraction of high-impact projects and projection, being a strategic tool for the development of the biotechnology sector.**



### EQUIPAMIENTO PARA CADA LABORATORIO

- Campana de extracción de gases
- Toma de aire comprimido
- Mobiliario de laboratorio Romero
- Taquillas
- Suelo continuo PVC antideslizante
- Servicios de:
  - Seguridad y video vigilancia
  - Limpieza
  - Recogida de residuos

## 6. Funding

Being a semi-public Institute it gets fundings directly from different public bodies as is stated in the publication in the Official Gazette of Cantabria, on 13th April 2007, of the decree creating a University Institute at the University of Cantabria, finally named the Institute of Biomedicine and Biotechnology of Cantabria (IBBTEC), and with the subsequent signing, on 17th April, of the creation agreement by the three participating institutions, the University of Cantabria, CSIC and IDICAN (Public Society for R+D+i of the Government of Cantabria).

The IBBTEC obtained €4,887,804 in funding during the period 2019-2020, mainly from **national public funding (53% of total funding)**, competitive (5%) and non-competitive (8%) regional public funding, and international public funding (25%). **Income from the private sector accounts for 9% of total funding** for what appears to be primarily laboratory services and the provision of facilities.

## 7. Challenges and Opportunities

As we have seen in the section on funding, it seems that dependence on public funds is the main challenge facing this Institute and its OpenLab. 53% of the budget comes directly from non-competitive public funds, and the rest, up to 91% from competitive public funds (regional or European research programmes), only 9% of its budget comes from private capital. This entails a risk of dependence on governments and their strategic plans.

On the other hand, the OpenLab's dissemination and transfer work through its Bio-incubator seems to have a high potential and perfectly reflects the research objective of reaching the business community. They have shown examples of the creation of

technology-based companies<sup>12</sup> in the field of Life-Science and this is undoubtedly a path that they should continue to explore.

## 8. References

[https://www.youtube.com/watch?v=hOoWfhI\\_CSk](https://www.youtube.com/watch?v=hOoWfhI_CSk)

[https://web.unican.es/noticias/Paginas/2021/abril\\_2021/OpenLab-IBBTEC-Jornadas-Transferencia-2021.aspx](https://web.unican.es/noticias/Paginas/2021/abril_2021/OpenLab-IBBTEC-Jornadas-Transferencia-2021.aspx)

<https://boc.cantabria.es/boces/verAnuncioAction.do?idAnuBlob=114330>

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<sup>12</sup> <https://www.europapress.es/cantabria/noticia-primera-empresa-surgida-openlab-ibbttec-quiere-crear-farmaco-psoriasis-20190705134124.html>

# Healthcare Living Lab Catalonia (Barcelona, Spain)

**Location:** C. de Pallars, 179, 08005 Barcelona

**Website:** <https://healthcarelivinglab.cat/>

**About:** The Healthcare Living Lab Catalonia (HCLLC) is a Living Lab specialized in the health and social fields. It's located within the facilities of their umbrella organization, a technological center called LEITAT<sup>13</sup>.

## 1. Purpose and mission

HCLLC's mission is to bring together healthcare centers, technological centers and Living Labs, and connect them to innovative companies facilitating the prototyping, testing and validation of their solutions based on its own methodology and in a fast and efficient way, maximizing the results obtained.

## 2. Organisational model and legal statute

HCLLC was constituted in 2016 as an evolution of an innovation platform called Innointegra, coordinated by the **Terrassa City Government** (Ajuntament de Terrassa). **LEITAT Technological Center** boosted this initiative and is the owner of the Living Lab nowadays, which is constituted by a technological center and a wide network of hospitals and other health services providers.

## 3. Stakeholders

As said above, HCLLC participates and collaborates with a wide network of actors such as hospital and health service providers. Moreover, they are active members in two of the core networks based on their activities:

They are certified Living Lab by the **European Network of Living Labs** that besides providing co-creation and experimentation activities through its members, ENOLL also acts as a platform for best practice exchange, learning and support.

HCLLC is also member of the European Institute of Innovation of Technology in Health <sup>14</sup> which is one of the largest healthcare initiatives worldwide. **EIT Health** aims to accelerate entrepreneurship and innovation in healthy living and active ageing, providing Europe's top talents with new opportunities and resources for the benefit of all citizens.

### Driving entity



### Collaborators



### Strategic alliances



<sup>13</sup> <https://www.leitat.org/>

<sup>14</sup> <https://eithealth.eu/>



#### 4. Operation & tasks

Co-creation activities: Activities aimed at developing a process, a product or a solution using a collaborative approach from multiple stakeholders involved. As a Living Lab, they operate as intermediaries among stakeholders and facilitate collaborative innovation.

Prototyping: Service aimed at developing models of a solution to test its ergonomics and function and be able to improve through iterations. HCLLC develops Looks-Like, Works-Like and Works-Like-Looks-Like prototypes, each of them targeted at specific purposes, through their driving entity LEITAT.

Usability testing: Activities aimed at assessing the ergonomics, design, usability, and function of a solution in early phases of its development. This allows the collection of feedback for potential improvement targeted to end-users.

Clinical validation: Studies aimed at demonstrating that the solution meets the predetermined specifications, and at validating its efficacy and efficiency. These validation studies are performed with a medium-large sample size and allows the client to generate results for the regulatory approval and the evidence that investors need to see.

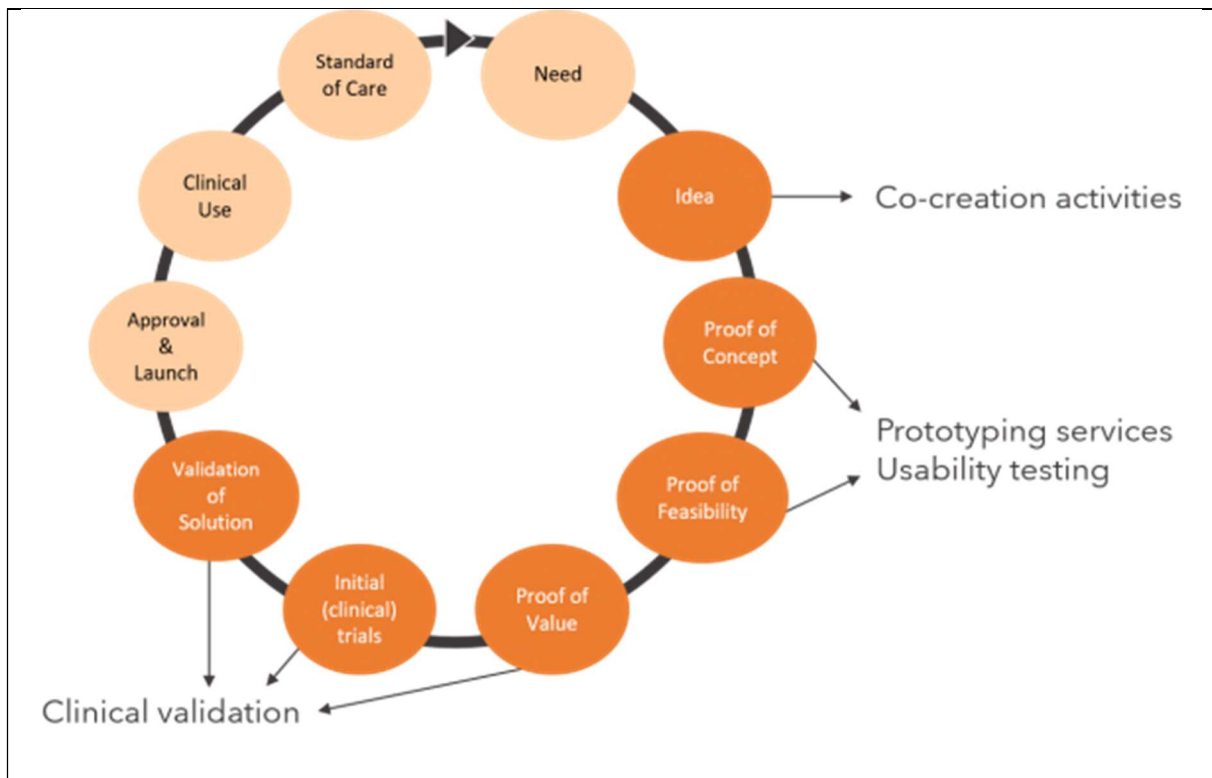
**Training and communication:** As a Living Lab, HCLLC prepares and executes strategies for the **dissemination of activities and project results**, with special emphasis on projects from European Consortia. HCLLC's target audience include health, science and technology professionals, citizens, and administration, among others.

#### 5. Activities and Outcomes

HCLLC participates in international consortiums for the development and validation of innovative solutions in the healthcare sector. They also participate in smaller proposals for national and European calls as a core partner or as Third Party.

Additionally, we also provide activities and services for private offers as those mentioned above.

The methodology HCLLC applies, allows the **transfer of knowledge and innovation** avoiding preventable mistakes that can delay the development of solutions.



## 6. Funding

The Healthcare Living Lab Catalonia works in projects with competitive funding, as well as in private offers.

According to the activity on its twitter profile, HCLLC has a strong presence in the European innovation and research arena. It seems that much of their funding comes directly from competitive European funding programmes, as they claim. It seems that they do this by relying on the most important European networks they collaborate with, ENoLL and EIT Health.

## 7. Challenges and Opportunities

What is an opportunity today - active participation in the most important European public health networks - is in itself a risk because of the financial dependence on public funds.

We are not able to know how much of HCLLC's annual budget comes directly from the services they offer to third parties, but it seems that the highest percentage comes from public funds. It would be interesting to know whether their network of collaborators pay or are willing to pay directly for the services HCLLC offers and not through publicly funded projects. This is information that we do not currently have.

## 8. References

<https://healthcarelivinglab.cat/collaborators/>

<https://www.leitat.org/nuestras-iniciativas/>

# ZORGLAB AALST (Aalst, Belgium)

**Location:** Werf 9 - 9300 Aalst

**Website:** <https://aalst.be/zorglab-aalst>

**About:** ZorgLab Aalst is an environment to test and experiment innovative solutions in health and care.

## 1. Purpose and mission

ZorgLab Aalst designs and tests solutions that support health and care together with citizens, entrepreneurs and care providers.

ZorgLab Aalst seeks innovative solutions that respond to the real needs of citizens and address challenges in care (technology, fewer hospital days, changes in primary care, ageing, etc.).

ZorgLab Aalst is an environment to test and experiment innovative solutions in health and care. The living lab supports and facilitates patient centered solutions in real life settings, providing a test panel of patients, elderly and care professionals and demonstration possibilities.



## 2. Organisational model and legal statute

Living lab as part of a broader organisation: part of the local government, research institution, network organisation, it falls back on broader infrastructure and overhead.

## 3. Stakeholders

The main stakeholders & beneficiaries are SMEs and start-ups, care organisations in need of innovative approaches to give answer to today's challenges, end users (healthy citizens, patients, seniors, care organisations, cities & regions, knowledge institutes).

The value created by having more insights from end-users helps not only the strategic level, but also at the operational one. Therefore, the elderly people are the centre piece in value creation: they are involved in the service design phase, as in the evaluation phase as testers, who give directions to the companies and the city administration to adapt product or services to their special needs.

#### 4. Operation & tasks

The Lab follows a Living-lab approach based on user-driven open innovation where the end-user stays at the core, the centre of the innovation process involving them from the very early stages. In doing so, they carry out the following activities:

- Service design methodologies to develop patient/ citizen centred solutions
- Organising and facilitating co-creation workshops
- Gathering feedback of patients/ citizens in research and development of new solutions, products and services to support health and wellbeing



#### 5. Activities and Outcomes

ZorgLab Aalst is working on health innovation within the following themes

- Permanent and independent living  
ZorgLab Aalst invents and tests with elderly people in Aalst solutions to continue living in their own home and familiar living environment for the rest of their lives.
- Age-friendly city  
The city wants to evolve into a city where young and old feel good together.
- Health technology  
ZorgLab Aalst works together with researchers and entrepreneurs on innovative solutions and applications that support citizens in their health and quality of life.
- Health care and prevention  
ZorgLab Aalst supports innovations that help the city's citizens to stay healthy and live independently.

- Collaboration in health and primary care  
ZorgLab Aalst, together with health care actors, is looking for smart solutions for (local) challenges, knowledge exchange and innovation in health care.

Embedded in a broad city strategy to innovate in healthcare, it can facilitate collaboration with health care organisations, and it has helped to create an accessible and healthy city in public spaces and services also leading to international projects.

- 56 developed products and services in health, care and wellbeing
- Since start collaboration with 26 businesses and 19 care organisations
- 1 demonstration house with innovation supporting ageing in place
- + 700 panel members

## 6. Funding

This initiative is directly funded and promoted by the city of Aalst. This city, under the strategy of Aalst Zorgstad, where they want to be recognize as an Age-friendly city (the city wants to evolve into a city where young and old feel good together), funds with public money the lab.

Moreover, the lab also receives funding from the West Flandrien Province (Oost-Vlaanderen)<sup>15</sup>.

The lab also applies for European research funds as it participates in different Interreg projects.

Support of the government for research & development is needed: national, regional and/or local

## 7. Challenges and Opportunities

Being the lab embedded in a broad strategy of the city to innovate in healthcare is a good opportunity and evidence of the city's commitment not only to the laboratory but also to the overall strategy, a network around the laboratory has been created and they have satisfactory experience in participating in networks such as ENoLL and in European projects.

The main challenge the Lab faces is the same as many of the living-labs, as often private companies have a wrong estimation of co-creation, which is seen as a way to quickly get feedback on a developed product, rather than a way to co-create a product from the beginning. Clearly the latter process is more time and money consuming.

Another possible bottleneck is also financial because if the product/service produced is too expensive or if people with low budget cannot really address the service the goal of the process is lost.

## 8. References

<https://www.co-val.eu/case-studies/blog/project/zorglab-ageing-in-place-aalst/>

<https://www.interregeurope.eu/good-practices/zorglab-aalst>

<https://aalst.be/artikel/wat-is-zorglab-aalst>

<https://innovationplayground.be/bedrijf/zorglab-aalst/>

<sup>15</sup> <https://innovationplayground.be/225-000-eur-subsidie-voor-zorglab-aalst-stimuleert-zorgeconomie/>

# Oxy.gen at OpenZone (Bresso, Italy)

**Location:** Via Lillo del Duca, 10, 20091 Bresso MI, Italia

**Website:** <https://oxygen.milano.it/en/>

**About:** Exhibition and training center for LifeSciences at the OpenZone Campus by Zambon Pharma

## 1. Purpose and mission

Oxy.gen is an educational hub and centre for the dissemination of scientific knowledge related to health and life science.

Oxy.gen offers initiatives focused on **research, education and the dissemination of knowledge**, for the purpose of **raising awareness among young people and adults**, so as to guide them towards new conceptions of **health, quality of life and personal well-being**, with an ever greater concentration on the sphere of communication, information and how we relate to one another, with an emphasis on the topic of Breath—both human Breathing and the Breath of planet Earth.



## 2. Organisational model and legal statute

The Oxy.gen space belongs to Zambon Group, a private chemical-pharmaceutical multinational company (<https://www.zambon.com/en>). Oxy.gen is located within OpenZone Campus, which is a scientific campus on the doorstep of Milan, entirely dedicated to Health funded entirely by private capital from Zambon S.p.A.

## 3. Stakeholders

Being part of the OpenZone ecosystem (Zambon S.p.A.), Oxy.gen has lot of partners (Zoners<sup>16</sup>) that can bring content (conferences, educational, exhibitions...) to the space, so they have a quite busy and interesting agenda around the Life science topics.

<sup>16</sup> <https://www.openzone.it/it/know/zoners>

Apart from the Open Zone Zoners, Oxy.gen itself is partnered with Fondazione Zoe Open Education and Parco Nord Milano. They have also the contributions from local and regional administrations (Regione Lombardia and Comuni di Bresso).

Moreover, OpenZone is member of IASP (International Association of Science Parks and Areas of Innovation), CEBR (Council of European BioRegion), InnovUp (Italian Innovation & Startup Ecosystem) and the Cluster Lombardo Lifescience.

#### 4. Operation & tasks

As said before, Oxy.gen belongs to the OpenZone Campus and its managed by the OpenZone Campus staff.

They offer basically two main type of services. The first one is an **educational** exhibition, permanent exhibition around the topic of air and breathe, with different itineraries and different target audience (from students to adults).

The second type of services is around **events and dissemination of knowledge**. They organise conferences, concerts, workshops<sup>17</sup> and they also hire the venue for a third organization to organise their event in the Oxy.gen space.

In that sense, OpenSpace Campus do also hire **more venues** apart from Oxy.gen. The Library (A place of scientific knowledge suggested for press conferences, workshops, round tables and panel discussion), Open Circle (A place for open dialogue suggested for pitching and conventions), the KitchenOpenAir (A casual meeting centre suggested for coffebreaks, lunches aperitifs and exhibitions) and finally the Open Lamp (A space for new ideas suggested institutional events).

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<sup>17</sup> <https://oxygen.milano.it/en/events>



## 5. Activities and Outcomes

Oxy.gen was created as part of the redevelopment project that transformed a neglected district into a **gathering place for the local community**. A venue constructed in the midst of a natural setting that has become a focal point within OpenZone – a science campus **dedicated to health** and a place to **exchange knowledge about research** and enterprise, thanks to common **areas for conversation and for informal meetings**.

Oxy.gen is a single space that can be used in myriad ways according to need. There are numerous possible configurations. **Events and activities can be planned inside the structure**, with a maximum attendance of 99 people in stall-style seating. The



technical equipment consists of a projection system with three screens that can operate separately or together, and a sound system with lavalier and cone microphones.

acqua/cubic metres of water

# 10.000M<sup>3</sup>

## INFO BREVI

short info

OXY.GEN

**ALLESTIMENTO**  
layout

platea fino a

# 99

partecipanti  
stalls up to 99

**CARATTERISTICHE TECNICHE**  
technical characteristics

desk regia fino a 2 PC  
control desk up to 2 PCs

2 microfoni a gelato  
2 cone microphones

2 microfoni lavalier  
2 lavalier microphones

telo con 3 proiettori  
laser separati  
screen with 3 separate  
laser projectors

giraslides presenter  
slide remote control

**SERVIZI GENERALI**  
general services

- sicurezza  
security
- illuminazione  
lighting
- climatizzazione  
air conditioning
- reception  
reception
- guardaroba  
cloakroom
- toilette  
restrooms

**SERVIZI AGGIUNTIVI**  
additional services

- percorsi di adutainment  
edutainment journey ✓
- service tecnico  
technical service ✓
- parkaggio convenzionato  
partner car parks ✓
- preselezione fornitori  
preferential suppliers selection ✓

**CONSIGLIATO PER**  
recommended for

- eventi istituzionali  
institutional events
- conferenza stampa  
press conferece
- panel discussion  
panel discussion

**POSSIBILITÀ ABBINAMENTO  
CON ALTRI SPAZI**  
possible combination with

- KoA' per organizzazione  
coffee break, aperitivi e cene  
KoA' to organize coffee breaks, aperitifs and dinners

## 6. Funding

In terms of Business Model it seems that, being this a private initiative from a pharmaceutical multinational, the profitability if this specific space is not the focus of it. Of course they do make money coming mostly from the permanent exhibition (the access to the exhibition rates from 120€ to 170€ per classroom) and from hiring the space to third parties, but all the (dissemination) events such as concerts, workshops, conferences, etc.... are for free.

The Oxy.gen Space is part of a much broader business strategy (the OpenZone Campus) and its main aim is to engage with local community, raise awareness on health and wellbeing aspects and build/enlarge the OpenZone LifeScience ecosystem.

## 7. Challenges and Opportunities

Architecture as and added values and location close to Parco Nord Milano  
Mainly own capital, self funded

The main challenge for this space seems to renew the permanent exhibition with new content to keep on attracting new visitors. Being located nearby Parco Nord the topic of the oxygen (breath, air quality, etc...) totally makes sense and the immersive experience of the different itineraries look meaningful, but it also will probably need to be redesign and renewed as time passes.

The fact of being substantially self-funded by own capital is also risky in terms of strategical decisions from the umbrella organization, Zambon S.p.A.

The unique and striking architecture of the space it's a claim in itself and it may attract visitors and curious people to visit it.

The main advantage Oxy.gen space has is that it's nourished by the content and relationships that the Open Zone Campus creates and weaves with and for the LifeScience Cluster of Lombardia.

## **8. References**

<https://www.openzone.it/en/act/news/Lombardia-Life-Science-Hub>

<https://www.openzone.it/en/act/news/IASP-CEBR-APSTI-CLUSTER>

<https://www.fondazionezoe.it/>

<https://www.lombardialifesciences.it/en/life-sciences-in-lombardy/>

<https://www.arcadis.com/es-es/projects/europe/italy/openzone>

<https://www.oztabloid.it/>

# IRBM Science Park (Pomezia, Italy)

**Location:** Via Pontina km 30, 600. 00071 Pomezia (RM) Italy  
10128 - Torino (TO)

**Website:** <https://www.irbm.com/>

**About:** Istituto di Ricerche di Biologia Molecolare

## 1. Purpose and mission

IRBM is a world-class organization with drug discovery expertise and an unprecedented track record with four drugs on the market.

IRBM is a research organization with decades of experience in translating nascent research into drug discovery programs, providing support across the drug discovery pipeline, and offering stand-alone services to their partners.

IRBM aims to create a National Collection of Chemical Compounds and a Screening Centre to bridge the gap between basic biomedical research and applied research through advanced industrial translational research approaches.



## 2. Organisational model and legal statute

The Institute is a spin-off of the Italian research site of Merck Research Laboratories, a highly successful, state-of-the-art research centre, which operated mainly in the areas of **antiviral and anti-cancer drugs**.

The Institute is constituted in an S.p.a. model and its organisation, management and control model is available as annexed document in the IRBM folder

IRBM also holds 70% of the share capital of Advent S.r.l., a company established in 2010 with Okairos S.r.l. for the GMP production of adenoviruses, 90% of Promidis S.r.l., a company active in the field of scientific research, and 70% of CNCCS S.c.a.r.l., a consortium company whose purpose is the development and management of a database of molecules of synthetic and natural origin and of cellular systems for the identification of new lead compounds for diagnostic and pharmaceutical applications.

### 3. Stakeholders

IRBM Group:

- ADVENT<sup>18</sup>: is a cGMP Contract Manufacturing Organization (CMO), located in Pomezia within the IRBM campus. It's an organization dedicated to the production of biologic clinical lots. The site is currently focused on adenovirus-based viral vectors, for vaccine and gene therapy applications.
- PROMIDIS<sup>19</sup>: Its aim is the identification of innovative drugs in areas of high unmet medical need. It benefits from the synergy between Promidis's drug discovery expertise and the cutting-edge pre-clinical and clinical research activities occurring at the San Raffaele Hospital Science Park.

IRBM is also part of the **The National Consortium and Collection of Chemical Compounds (CNCCS)** together with the Italian National Research Centre (CNR) and the National Institute of Health (ISS). It's a private-public consortium with a mission to be a "Lead Factory," identifying compounds acting on innovative biological targets. It also acts as a center for translational research in the area of Rare, Neglected and Poverty-Related Diseases.

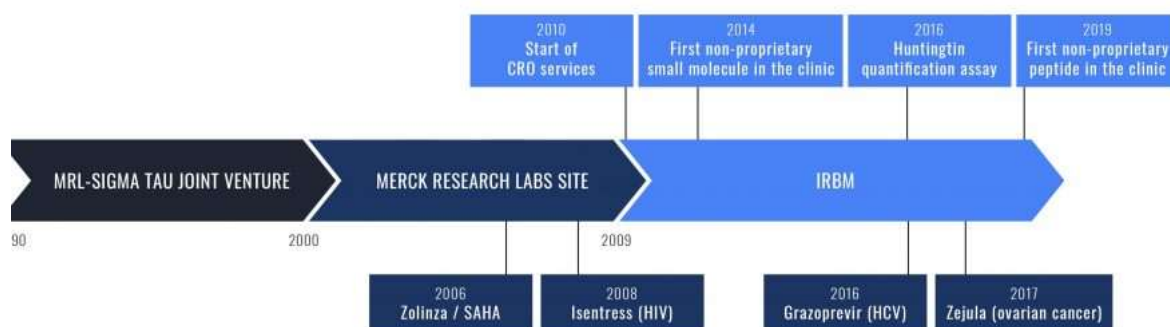
### 4. Operation & tasks

IRBM offers **industry and university laboratories research services** in drug discovery, chemistry, biology, biotechnology and related sciences.

Their offer is a unique blend of broad scientific expertise, global pharma heritage, and unprecedented success in bringing drug discovery projects from conception to the clinic.

### 5. Activities and Outcomes

Scientific dissemination through Articles and white papers as well as lots of scientific publications on journals.



IRBM has delivered over 25 candidates in the clinic. Their researchers have published over 800 papers, and appear among the inventors of over 100 patents. In 2016, IRBM developed an ultrasensitive mutant Huntingtin quantification assay, now widely used to detect levels of the mutant protein in samples from Huntington's disease patients.

The first non-proprietary small molecule drug developed at IRBM since the reorganization entered the clinic in 2014, while the first non-proprietary peptide drug is entering the clinic in 2019.

<sup>18</sup> <https://www.advent-gmp.com/>

<sup>19</sup> <https://www.promidis.it/>

## 6. Funding

Of all the use cases presented in this document, the IRBM case is undoubtedly the **most focused on pure business aspects** with a traditional and not so open innovation-oriented approach.

The organisation's annual funding and budget seems to come almost entirely from the services they offer and from pure economic activity, although they also apply to European and national research funds, but this does not seem to be the bulk of their funding.

## 7. Challenges and Opportunities

With its extensive experience, IRBM can offer the possibility to develop integrated projects (actionable go/no-go decision points are constructed, and a 'first to fail' approach) , or to have its support on smaller, stand-alone projects.

IRBM offers all these opportunities, focusing on its strengths:

- An ecosystem of partners of different nature: biotech companies, pharmaceutical companies, academic institutions, venture capital companies and non-profit organizations.

- Specific therapeutic areas: neuroscience, infection disease, oncology and rare and neglected diseases.

- Research excellence.**

From a research point of view, one of the areas of focus will be to help ensure a more resilient global response to future epidemics by producing second generation vaccines and treatments for SARS-CoV-2 and new coronaviruses, funded by funding by The European Investment Bank (EIB).

## 8. References

<https://www.irbm.com/about-us/grants/european-funding/>

<https://www.irbm.com/about-us/grants/italian-funding/>

<https://www.europeanpharmaceuticalreview.com/news/170713/irbm-eib-funding-expand-rd-covid-19/>

# COMO NEXT Innovation Hub (Como, Italy)

**Location:** Via Cavour, 2 - 22074 Lomazzo (Co) – Italy

**Website:** <https://www.comonext.it/en/spaces-and-services/>

**Foundation Year:** 2016

**About:** ComoNExT is a Digital Innovation Hub and a startup incubator certified by the Ministry of Economic Development located within the ancient Cotton Mill Somaini in Lomazzo

## 1. Purpose and mission

The Company's objectives are basically threefold: to attract innovative enterprises, to transfer innovation to the territory, and to **foster the development of new entrepreneurship through start-up incubation**.

In addition, the company provides general services to the companies and entities established there.

## 2. Organisational model and legal statute

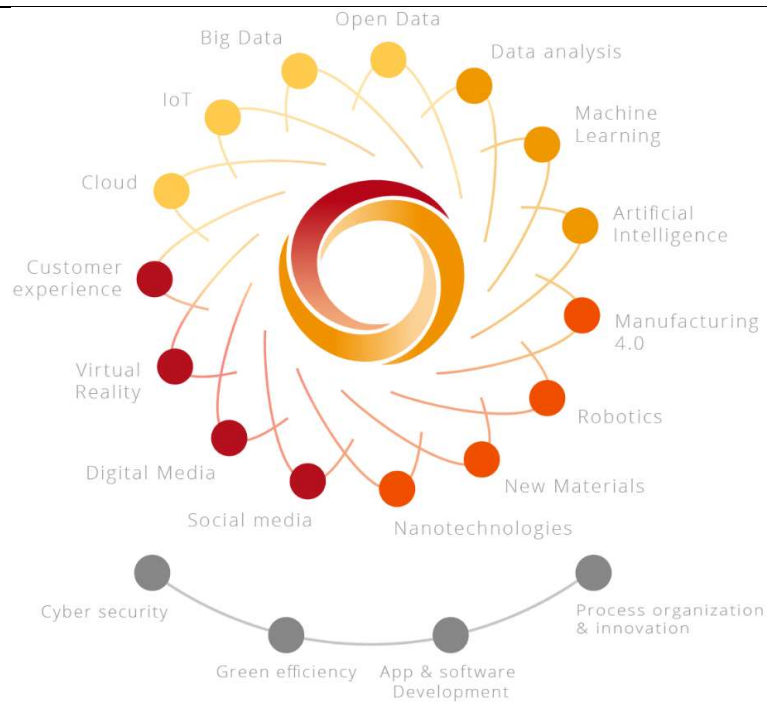
Sviluppo Como - ComoNExT SpA, **Public Limited Company**, was established in 2016 through the merger of Sviluppo Como SpA and the ComoNExT SCpA Science and Technology Park, the two entities promoted by the Chamber of Commerce of Como for the enhancement of Como's social, cultural and entrepreneurial fabric.

## 3. Stakeholders

ComoNExT **stablishes a partnership** with members and structured collaborations covering fields such as: Institutions, University Institutes, Research Centers and Technological Science Parks, Associations, Venture Capital and Other Partnerships

## 4. Operation & tasks

ComoNExT **developed** the exclusive "Innovation Transfer" model named **NExT Innovation®**. The consulting activities of NExT Innovation® are linked to the themes of digital transformation and Industry 4.0, mainly focusing their activities in these four macro categories Data Analysis, From Digital To Real, Digital Communication, Cross Competences.



ComoNEXT is also an **incubator certified by MISE** (Ministero dello Sviluppo Economico), the Ministry of Economic Development. Its startup inclusive Incubation service is oriented to future entrepreneurs, students, professionals, university and company spin-offs, startups (less than 12 months). Applicants can choose to participate in this initiative in two ways: applying to the call “Dall’Idea all’Impresa” promoted by the Chamber of Commerce of Como, or by sending the idea directly to ComoNEXT.

### 5. Activities and Outcomes

Innovation hub with great potential: **150 established companies**, of which a third start-up; **900 knowledge workers**; an area of approximately 21,000 square meters for a total of approximately 130 office and laboratory spaces; 60 workstations (co-working) dedicated to start-ups; an industry 4.0 demonstrator and a neuromarketing laboratory; a network of 800 companies connected with universities, research centres, banks, investment funds; over 10 million euros disbursed to host companies through projects funded or venture capital; numerous ongoing innovation projects involving hosted companies.

### 6. Funding

Depending on the tasks carried out, their collaborations and the information on the results obtained, it can be extrapolated that those are the funding sources:

- The companies that have established themselves in the available spaces, paying a rent for spaces and services.
- Contracts with private companies that require their consultancy services.
- Collaborations with public administration and venture capital to promote the start-up incubator service.
- Erasmus+ Programme and H2020 Programme of the European Union

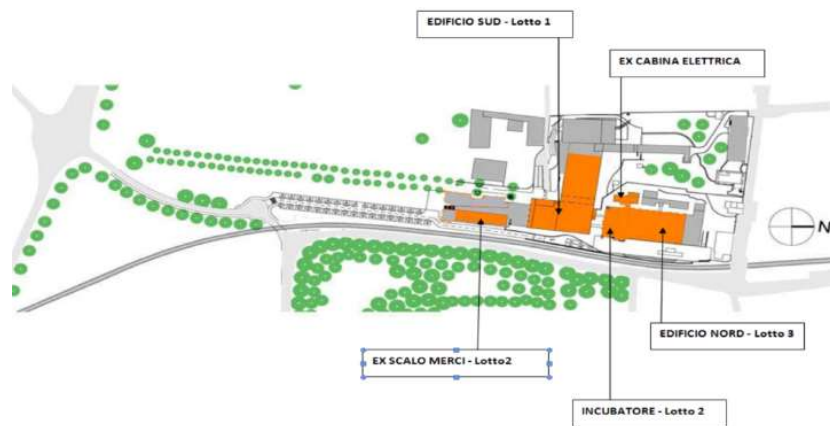
### 7. Challenges and Opportunities

ComoNEXT 's opportunities are based on a broad and complementary offer. On the one hand, having a high level of skills and expertise in innovation consultancy for

companies, but at the same time offering them an ecosystem of partners with whom they can identify collaborations and synergies.

The combination of this ecosystem and specialised knowledge is also the key to advising and promoting new start-ups, together with the support of the public administration.

And all this with offering offices and shared spaces, where all these activities can be carried out in a centralised manner. In this way, its target audience is both established companies that wish to establish a production section or research laboratories, as well as emerging innovative companies that can benefit from the facilitated conditions and technical support and logistics offered by the business incubator.



## 8. References

<https://www.comonext.it/>

[https://www.comonext.it/il-parco/#cn\\_partnership](https://www.comonext.it/il-parco/#cn_partnership)



# BIO Industry Park (Torino, Italy)

**Location:** Via Ribes, 5 – 10010 Colletterto Giacosa (TO) – Italy

**Website:** <https://www.bioindustrypark.eu/attivita/?lang=en>

**Foundation Year:** 1998

**About:** Science park focused in Life Sciences and Human Health promoting opportunities for institutions, local and international companies, clusters and other science parks to cooperate and form partnerships

## 1. Purpose and mission

Bioindustry Park Silvano Fumero was established in 1998 to foster the creation and development of innovative businesses and to connect the business world to research centres and universities.

## 2. Organisational model and legal statute

It is a **joint-stock company** with more than 12 million Euros of share capital.

## 3. Stakeholders

Bioindustry Park is an **ecosystem made up of companies, associations and foundations, research centres and universities.**

Bioindustry Park is member of InnovUp, Italian Innovation & Startup Ecosystem, IASP International Association of Science Parks and Area Innovation and contributes to ALISEI (Advanced Life Science in Italy), the national Life Sciences cluster. Recently Bioindustry Park became partner of Sistema Invitalia Startup.

## 4. Operation & tasks

Mainly two types of activities are carried out:

-**Research** in the field of Life Sciences and Human Health, hosting and promoting the study of innovative medical devices and production, **focused on diagnostic equipment and pharmaceuticals.**

-**Training programmes**, go hand in hand with research and production and the on-campus ITS Biotechnology and New Life Sciences Foundation.



## 5. Activities and Outcomes

Some features that give an idea of this project magnitude: 42 Businesses, 3 research centres, 20 small enterprises, 9 new startups, 23.000m<sup>2</sup> of laboratories, offices and pilot centre businesses, 53.000m<sup>2</sup> of green areas and general services.

Bioindustry Park has been launching, managing and actively participating in projects and initiatives at nationally, in Europe and internationally with the aim of foster the development of life sciences and make businesses more competitive, especially Small and Medium Enterprises (SMEs).

## 6. Funding

Bioindustry Park is an outstanding **example of public-private cooperation**. Since 1998, 200 million euro of investment broken down as follows: 40ml public cofinancing, 146ml private investment and 16ml own funds.

## 7. Challenges and Opportunities

From the members point of view, and in their day-to-day work Bioindustry Park provides them access to a network of businesses, flexible models of investment financing, general service sharing, possibility of outsourcing “non-core” activities, mentoring and specialist advice.

But being aware that each local system cannot offer all the competencies and facilities for each actor to enjoy optimal development, therefore this has **led to the creation of a wide and diversified network of partners**, thus broadening collaborations and sharing knowledge.

## 8. References

<https://www.bioindustry-park.eu/attivita/?lang=en>

<https://www.bioindustry-park.eu/le-aziende-nel-parco/?lang=en>

<https://www.bioindustry-park.eu/collaborazioni/?lang=en>

# Heidelberg Innovation Park (Heidelberg, Germany)

**Location:** Patton Barracks in Heidelberg. The site is in an easily accessible location on Speyerer Strasse and directly adjacent to Bahnstadt, the city's new district of the future.

**Website:** <https://www.hip-heidelberg.com/en/start-en/>

**About:** Heidelberg Innovation Park is a hotspot for innovations in the fields of IT, digital media and bioinformatics.

## 1. Purpose and mission

Heidelberg Innovation Park (HIP) is a new hub for innovation in IT, AI, digitalization and life sciences.

HIP is the place where companies working in IT and life sciences become a force of collective innovation through the development of common projects.

## 2. Organisational model and legal statute

The hip is being planned and realised by the Patton Barracks development company (EGP – a company of the city of Heidelberg and the Sparkasse Heidelberg): Entwicklungsgesellschaft Patton Barracks mbH & Co. KG.

The Heidelberg Innovation Park community is managed by the Economic Development and Science Department of the Municipality of Heidelberg.

The real state section is managed by a real state advisor and consultancy company "Inmobilen Sparkasse Heidelberg"<sup>20</sup>.



## 3. Stakeholders

The community HIP has built focuses their activity on IT, digital services and Life sciences At this very moment a total of 13 organizations are established in HIP<sup>21</sup> among which the following stand out:

- ERNW Enno Rey Netzwerke GmbH is a manufacturer-independent IT security service provider
- BioLabs Hedelberg, a premier co-working space for life science startups<sup>22</sup>

<sup>20</sup> <https://s-immo-hd.de/>

<sup>21</sup> <https://www.hip-heidelberg.com/en/community/>

<sup>22</sup> <https://www.biolabs.io/heidelberg>

HIP is part of the Business Development Center of Heidelberg which in turn is part of the network of centres of the Heidelberg Technology Park<sup>23</sup>. An extensive network with a high participation of life sciences organisations and universities<sup>24</sup> and with which there is a direct connection via the Technology Park network itself. Among the potential big partners and stakeholders in life science are:

- The German Cancer Research Center (DKFZ)
- The National Center for Tumor Diseases (NCT)
- The European Molecular Biology Laboratory (EMBL)



#### 4. Operation & tasks

One of the first milestones is hosting a centre for innovative entrepreneurial ideas in the field of organic electronics, a multifunctional office and laboratory building for start-ups.

Another highlight in the role of Heidelberg Innovation Park (HIP) is to focus on **international links**, bridging the gap **between Germany and China**, since the **Sino-German High-Tech Park will be home to the R&D departments of major Chinese companies**, economic zones, research institutions and development platforms belonging to cities and associations.

<sup>23</sup> <https://www.technologiepark-heidelberg.de/en/sites/#Sites>

<sup>24</sup> <https://www.technologiepark-heidelberg.de/en/tenants-and-associated-members/#Database>



## 5. Activities and Outcomes

**BioLabs**, a US company, has chosen Heidelberg as its first European location for its special **incubator**. It is aimed at **international start-ups from the life science sector**, as well as founders who are planning the commercial implementation of their research originating from the university and Heidelberg research institutions.

## 6. Funding

Although it is difficult to find explicit information on this, the following sources of funding can be identified from all the research carried out:

- Sale and rentals of plots** of land.
- Possible membership of the partners by providing general and common services, outsourcing non-core tasks.
- Realization of sporting events and their retransmissions.
- Agreements with the public administration** for the use of its facilities by educational centers.

## 7. Challenges and Opportunities

From a business point of view, the focus is on the mix of companies of varying sizes on a global and local scale, enabling the **creation of synergies and promoting the creation of networks and cooperation between them**. Diversifying business ideas, focusing on research, collaboration with education and public administrations. And laying the foundations for stable international links thanks to its members.

Regarding the physical layout Heidelberg Innovation Park (HIP) spatial disposition enables a **healthy mix of temporary and long-term uses which make the integration of stakeholders from various scales and diverse backgrounds possible**. Possibilities for expansion, if necessary, as it has a large surface area.

## 8. References

<https://www.heidelberg.de/english/Home/develop/conversion.html>

<https://www.heidelberg.de/english/Home/develop/patton+barracks.html>

<https://www.heidelberg.de/english/Home/develop/heidelberg+innovation+park.html>

<https://www.hip-heidelberg.com/en/2021/08/16/hip-becomes-the-first-european-location-for-biolabs/>

<https://hosoyaschaefer.com/projects/heidelberg-innovation-park-2/>

<https://www.eu-startups.com/2021/11/growing-biotech-ecosystem-in-southern-germany-with-biolabs-launch-in-germany/>

# Recommendations for the LSOH

As we have mentioned in sections before, one of the key recommendations after analysing the ten case studies, is that LSOH focusing only on dissemination activities seems not to be sustainable over time. One alternative could be to focus on dissemination activities with strong focus on Responsible Research and Innovation, Open Science and Citizen Science, therefore, applying to research programmes (European, National or Regional) where LSOH could not only take the responsibility on dissemination but focusing the project itself in Citizen Science or RRI activities.

The other alternative, that is absolutely compatible with the first one, is to focus the Open approach of LSOH not only on Open Science and dissemination but on Open Innovation.

In that sense, we've seen that those spaces focused on Open Innovation and community building services, they get paid usually by the community members with a fee in order to carry out activities that may lead to identify opportunities for collaboration and innovation among the members. Activities such as workshops, round tables, hackatons or even identifying funding opportunities.

Another very relevant aspect of the business models for those spaces focused on Open Innovation is that public funding is key, in two senses. One, directly from regional or local administrations supporting the initiative in order to boost open innovation ecosystems in their region or city and, two, in applying for regional or European research programmes as project partners (usually with a strong focus on Citizen Science aspect, Responsible Research & Innovation and Co-creation activities). This is something that may not only help to sustainability in terms of funding but also in terms of ecosystem, as these types of projects usually help to broaden the actors of the ecosystem

It is worth mentioning that, as long as these spaces have a very strong focus on community building and relational capital, having a strategy for stakeholders engagement is key. We've seen that most of them belong to relevant European clusters and networks (ENoLL, EIT...) and are positioned as referent in their regional ecosystem, so it is strongly suggested to apply for membership to those European Networks and start establishing connections with relevant actors and links with the regional clusters, which in the case of LSOH should be the Cluster Lombardo Scienze della Vita<sup>25</sup>

In that sense, during the immersion and knowledge gathering mission to MIND in May 2022, we had the opportunity to meet some potential Stakeholders for the LSOH and confirm that there is a community interested in the project there in MIND and the surroundings. We chatted with Astrazeneca and Bio4Dreams, which actually is located in the OpenZone Campus in Bresso, so there are already connections and links with the OpenZone initiative, thus, is suggested that MIND local coalition should consider taking advantage of those connections.

In terms of competition, there is a high risk for LSOH, both, geographically and thematically, as there is this space 15 km away that has a very similar focus (Oxy.gen within Open Zone<sup>26</sup>), both in terms of services (high impact exhibitions, training, workshops, workshops...) and in terms of community and open innovation. A reflection on the possible collaboration with this space should be considered in order to reach a

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<sup>25</sup> <https://www.lombardialifesciences.it/>

<sup>26</sup> <https://oxygen.milano.it/en/>

win-win agreement. In this sense, one of the assets that MIND and LSOH have over OpenZone is the close relationship and presence of Higher Education Institutions.

When it comes to the Business Model and the potential list of services that LSOH may offer in the future, a reflection about whether renting space for the organisation of dissemination-related events by third parties should be made, considering if 1) is financially sustainable, and 2) is this something that LendLease would agree to or would it be in direct competition?

On the other hand, it has been observed in the analysis of the case studies that there are a number of other services to offer in addition to the organisation of dissemination and training events that could be interesting to consider. These services are directly related to Open Innovation, and all of them are also considered in the literature, as from the conceptual framework of innovation intermediary (Lee et al. 2010), so services such as network/community construction, management and database of the community, boosting the culture of collaboration and facilitating the collaboration among the community partners could be an interesting approach for sustainability. Among these services there is also the identification of funding opportunities for the open innovation initiatives. The members of the community would pay a fee for these services.

Those Open Innovation services must be initiated with community activation actions and attracting areas of interest among members, for which it is recommended to carry out innovative training and dissemination methodologies such as Pecha Kucha<sup>27</sup>, Fuck Up Nights<sup>28</sup> or Creative Mornings<sup>29</sup>, and to establish partnerships with these initiatives in order to attract relevant speakers and topics of interest.

In conclusion, it is suggested that the MIND manager should be involved in the process of defining and designing the LSOH because 1) the physical space chosen will condition the approach but mainly because 2) a strategy of dissemination and rental of space might not interest the manager and implementing an Open Innovation strategy (which is the most realistic at this stage) should be agreed with the owner of the space and the tenant manager, as this approach would require a joint strategy of stakeholder involvement and partnership building.

Once the strategies are aligned, the services to be offered by the space would be related to the activation and management of the community and the capture of areas of interest for the members.

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<sup>27</sup> <https://www.pechakucha.com/>

<sup>28</sup> <https://www.fuckupnights.com/organize-city/>

<sup>29</sup> <https://creativemornings.com/cities/mil/talks>



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- [1] West, Joel, "Challenges of Funding Open Innovation Platforms: Lessons From Symbian Ltd.," in Henry Chesbrough, Wim Vanhaverbeke and Joel West, eds., *New Frontiers in Open Innovation*, Oxford: Oxford University Press, 2014, pp. 71-93. doi: 10.1093/acprof:oso/9780199682461.003.0004
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