



HEALTH & LIFE SCIENCE CLUSTER BULGARIA

Let me share some facts about Bulgaria!

Where cutting-edge technology meets one of the world's strongest talent pools for a smart future!

- ❖ 1st place worldwide Olympic medals in linguistic
- ❖ 6th place worldwide Olympic medals in STEM (Mathematic, Informatic and Natural Sciences)
- ❖ 42% of people in STEM are Females
- ❖ 2nd place in EU by volume of mineral water
- ❖ More than 500 mineral springs with water temperature from 12 to 103 degrees
- ❖ Bulgaria is one of the 14 countries in the initiative MEGA (The Million European Genomes Alliance)



Health & Life Sciences Sector in Bulgaria

- 17th in Europe in terms of number of clinical trials
- 1200 companies in the sector
- 25 000 employers
- New therapies adoption – 956 days (18th place ranking in the EU)
- 10 000 patients engaged in clinical trials annually in Bulgaria
- 128 medical centres engaged in research
- 120 Private Hospitals
- The market value of pharmaceutical products manufactured in Bulgaria is amounted to € 2 Bn.

- 9 Universities with medical and healthcare specialties
- 11 000 students in the field of healthcare, medicine, pharmacy and dentistry
- 1 400 students attend Biotechnology and Biology programmes
- 100 mil EUR annual turnover from clinical research or 7.5% of the overall turnover of the economy

Health & Life Sciences Report will be released in Nov. 2024!





HEALTH & LIFE SCIENCE CLUSTER BULGARIA

About us

High conductive deep-tech entrepreneurship ecosystem!

Network of businesses and organizations with Key Activities focused on practical application of life sciences & health.

Innovative companies in the field of drug discovery, genetic research, 3D human tissue printing, software solutions for medical and outpatient care, drug manufacturing, nutrition supplements, green technologies, bio based technology, foodtech, agritech and many more.



Key Memberships

KRIB - Confederation of Employers and Industrialists in Bulgaria

- 800 000 employees, 40 000 organisations, $\frac{3}{4}$ of the GDP.
- Key pharma members: Huvepharma, TEVA Pharmaceuticals, Sopharma, Biovet, Sofiamed hospital, Roche Bulgaria, Bulgarian Hospital Association and many more.

Bulgarian Employers' Association of Innovative Technologies (BRAIT). Key members: Automotive Cluster, Basscom, Cluster for Mechatronics, ICT Cluster and more.

AI Cluster Bulgaria

National Cancer Alliance - includes 22 scientific, patient and other non-governmental organizations across Bulgaria

Bulgarian BioScientific Society consist bulgarian scientists all over the world

European Health Institute



Key Memberships

The Cluster is a Member of EuropaBio www.europabio.org - Europe's largest and most influential biotech industry organization, CERB www.cebr.net, ECHAlliance www.echalliance.com, Meta Cluster for Personalized Medicine – MedicNest, ECCP clustercollaboration.eu, and has a strong support and partnership with local authorities, European representors (Iliana Ivanova, Eva Meydel, Emil Radev, Frederico Mena, Ray Pinto among the others), international partners such as Oxentia www.oxentia.com, the world first biotech MBA program BBI Cambridge and Barcelona <https://academy.venrize.com>, Deep Knowledge Group: DKG www.dkv.global, etc.

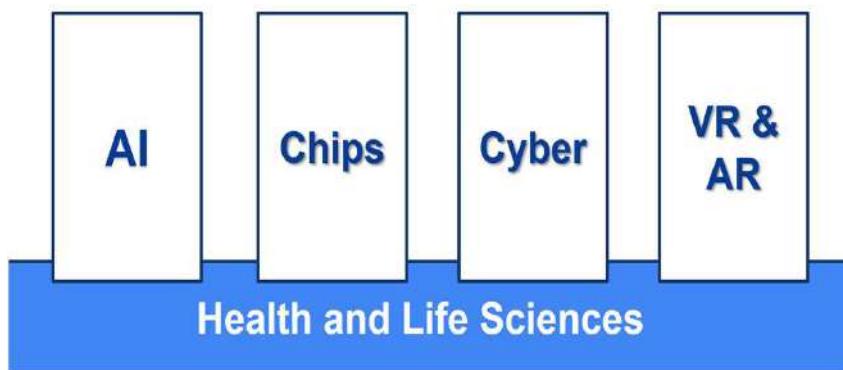
We are passion about Female deep tech entrepreneurship. Therefore, we are part of GRIT - International Female Accelerator, AI Girls, Female Founders Association.

We have a strong collaboration in SEE region with Greece (iED, Joist), Romania (RoHeath, Immago-Mol etc), Turkey (Bogazici University, DAI, Ankara Theranostics, Tekiu, etc), Serbia (AI Serbia, AIDA Technologies, etc) & other Balkan countries..



Network and Tech Domains

- Spinoff Culture (Events, Conference, NEIA, Master classes)
- Female Entrepreneurship (GRIT, AI Girls)
- Deep tech Multidisciplinary approaches (Technomedica, AI & I Factory, Bootcamps)
- Venture Build Studio, TTO (Venrize Life Sciences)
- Report & Analysis (AI & ME Report, Health & Life Sciences Report, Surveys)
- Ethic & Regulation (Working groups – ICT, EU AI Act, U-space, Data Act)





European Projects

INNAXE - Horizon EU

- * Strengthen interconnection amongst European Life Sciences and Healthtech innovation ecosystems
- * Foster an open dialog to increase their efficiency and innovation capacities
- * Focus on the challenges and opportunities of the twin transformation that stakeholders are undergoing
- * Define a joint long-term programme (Joint Action Plan) to overcome current fragmentation in innovation capacities



The Quadruple Helix

Intra- & Inter ecosystem Assessment

Connect & Scale up

Joint programme & Implementation plan

Partners

- BIOCAT - Fundacio Bio Regio de Catalunya
- Medicen Paris Region
- BIORN Cluster Management GMBH
- Health & Life Sciences Cluster Bulgaria
- Foreningen Danish Life Science Cluster
- Council of European BioRegions



VELES - Horizon EU

VELES HUB accelerates the innovation excellence in smart healthcare within Bulgaria, Greece, Romania and Cyprus, facilitated by advanced partners from Germany, Spain and Sweden.

VELES creates a sustainable place-based innovation ecosystem, enabled by Regional Smart Health Data Space, that includes a novel transformational framework, R&I and investment strategy and action plan for research, development and adoption of innovative and secure digital solutions that underpin the delivery of sustainable healthcare services.

7 European countries
15 Consortium Partners
1 Smart Health Excellence HUB

Funded by the European Union

VELES

CONSORTIUM PARTNERS

BULGARIA	ROMANIA	GREECE	CYPRUS
GATE Bulgaria Smart Society	HEALTH & LIFE SCIENCES CLUSTER iMAGO-MOL Institutul Național de Cercetări și Inovații în Sănătate și Mediu	INNOVATION PARK JOIST	CYENS Centre of Excellence AMEN
telelink business services	fiscadi	HDHC Hellenic Digital Health Cluster	3ahealth
PERVAKA KALYAPIN ПЕРВАКА КАЛАЯПИН			NATIONAL eHEALTH AUTHORITY
SPAIN	SWEDEN	GERMANY	
INSOMNIA DIGITAL INNOVATION HUB	CHALMERS INDUSTRITEKNIK	INTERNATIONAL DATA SPACES ASSOCIATION	

VELES

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Scan to stay in the loop with updates about the
Regional Health Data Space

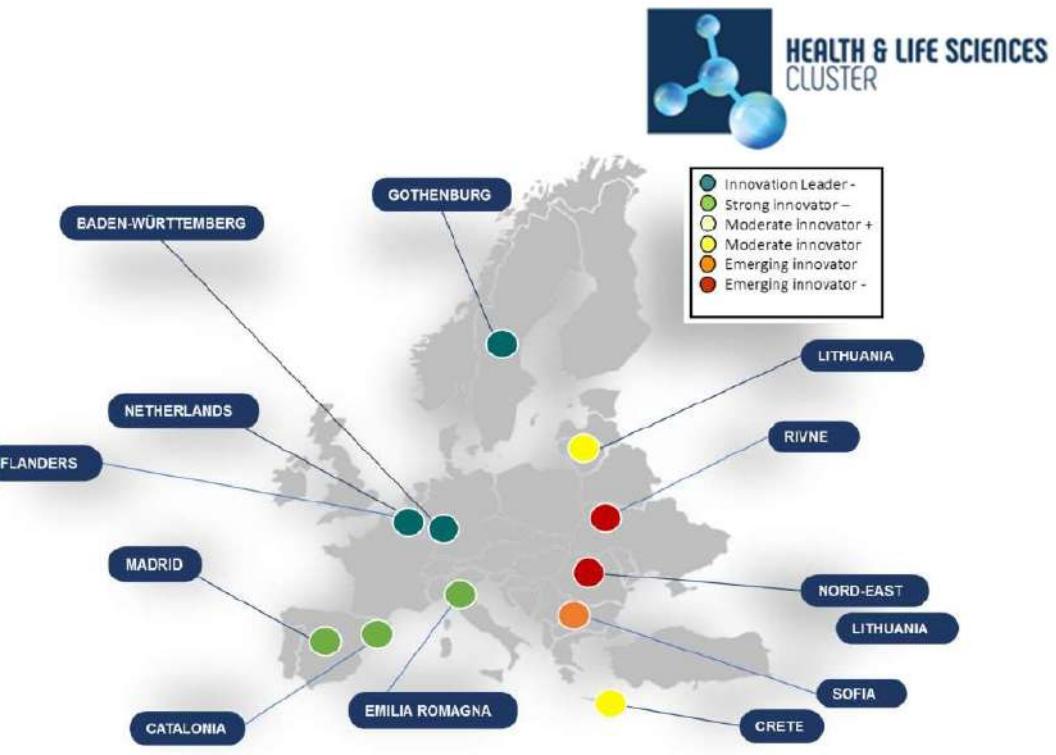
Funded by the European Union

PRECISEU - Horizon EU

The purpose of the PRECISEU project is connecting innovation ecosystems across Europe to efficiently advance towards a truly personalised healthcare, transferring practices and solutions from region to region and scaling up deep-tech healthcare innovations based on advanced therapies medicinal products (ATMPs) and health data across Europe.

The project aims to:

- Accelerate the adoption of personalised medicine (PM) at a European level;
- Reduce fragmentation and inequalities across the EU;
- Support the implementation deep-tech innovation in diverse ecosystems with different innovation levels, assets, strategies, and policies.



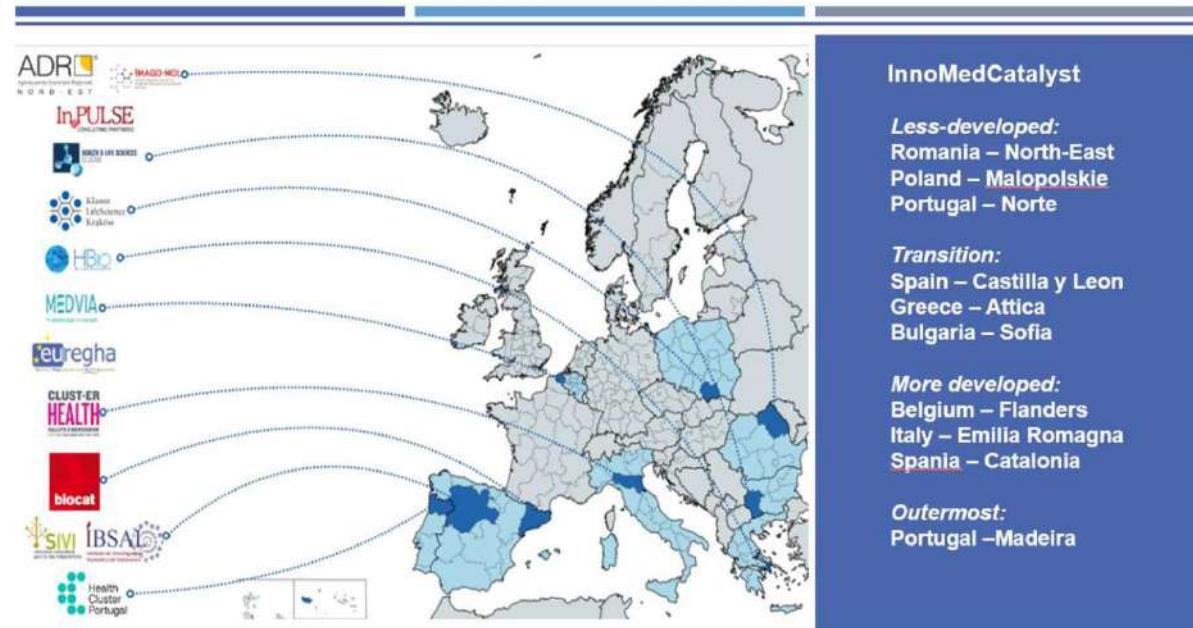
12 European countries (including Ukraine)
25 Consortium Partners

InnoMedCatalyst - Horizon EU

The InnoMedCatalyst project aims to enhance the regional innovation capacity of the precision and personalized medicine ecosystems across Europe, where startups, spinoffs, scaleups, innovators and healthcare providers will increase their capabilities to develop, test and refine digital health solutions as business cases, while concurrently preparing a series of interregional investment projects ready for further investment and exploitation.

The 5P concept can unlock synergistic opportunities to advance healthcare on multiple fronts:

- Predictive Medicine
- Preventive Medicine
- Personalized Medicine
- Patient-Centred Care
- Population Health Management.



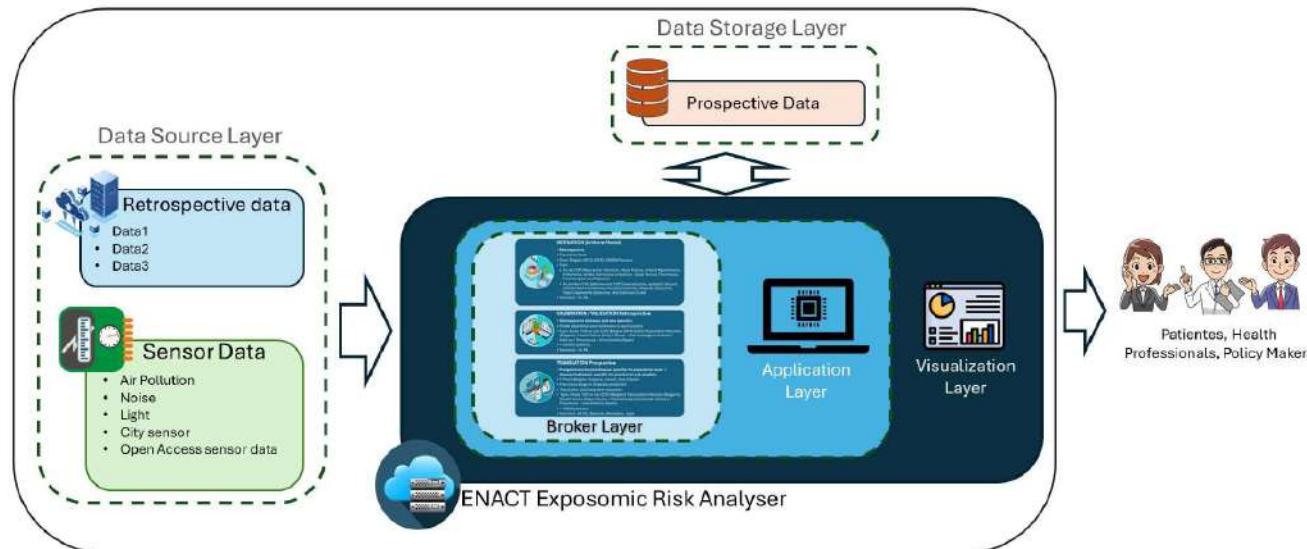
12 European countries
13 Consortium Partners

ENACT - Horizon EU

The overall objective of ENACT is twofold:

first, to derive a model assessing the exposomic risk (risk score based on poly-environmental exposures) of hospitalization for acute vascular and non-vascular NCD across different populations and locales;

second, to translate this risk from population to the individual level, predicting the risk of developing preclinical asymptomatic stages of disease.



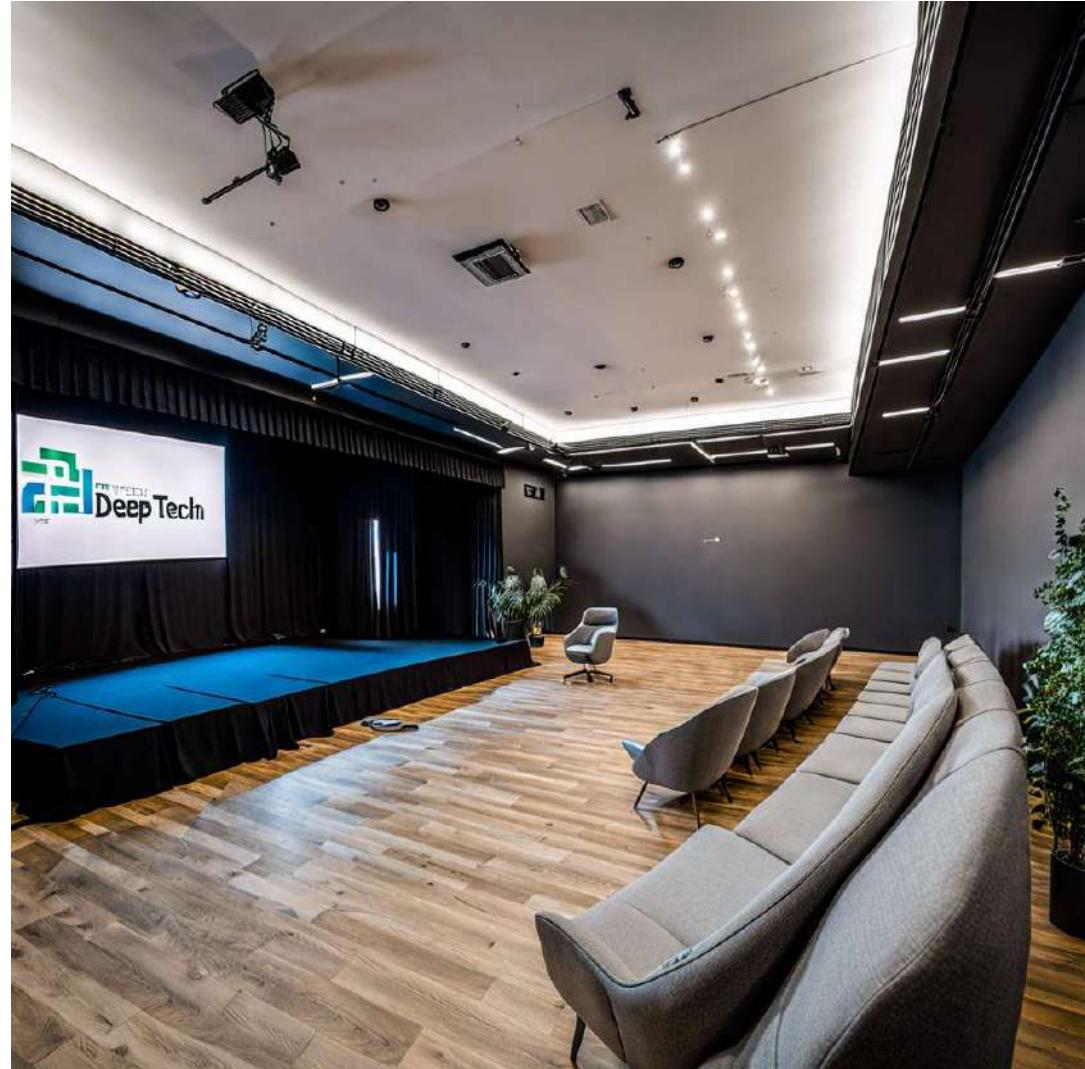
12 European countries
21 Consortium Partners

Deep Tech Valley Hub – Invest Sofia



The "Deep Tech Valley Hub" is a state-of-the-art event space designed to be a hub of innovation and collaboration in the deep tech sector, with a special emphasis on health and life sciences. This versatile venue supports a wide range of events, from small conferences to intimate workshops, fostering a dynamic environment for idea exchange and partnership building.

With a central stage equipped for both live and virtual presentations, adaptable seating, and modern ambiance, the hub is tailored for flexibility and engagement. Collaborations with Invest Sofia and the Health and Life Sciences Cluster ensure that the hub is a pivotal center for advancing technology and healthcare innovations. It attracts entrepreneurs, researchers, investors, and industry leaders, making it a key player in shaping the future of these sectors.





Key Initiatives

Spinoff Initiative

Our goal for 2030 is to create 100 native spinoffs in Bulgaria and become a powerhouse for science-based innovation in Europe.

The next edition will be held on 19-20 June 2025!
More information at: www.spinoff.bg

Key numbers:

150+ Speakers
500+ Visitors
30+ Spinoffs
30+ Universities and TTOs



AI & I Factory Challenges

AI & I Factory Hackatons

2 successful editions in Sofia and Plovdiv

10 powered ideas, 3 spinoffs, 1 NGO

Seaside AI/ML and Brain Tech Bootcamp

Dates: 07.10 – 12.10.2024

Location: Sofia

Participants: PhD and talented students

Partners: AI Cluster Bulgaria, Health & Life Sciences Cluster, Digital National Coalition, ViBRate projects, Academia, America for Bulgaria.



Technomedica

Cover areas:

- Rehabilitation
- Prevention and Diagnostic
- Traumatology
- Education and Training
- Medical environment
- MedTech

Technology fields:

- AI, VR, 3D scan & print
- Biofeedback
- Cyber and Ethics
- Sensors, Medical devices

Description:

First-ever multidisciplinary program for generating new spinoffs - **Technomedica - Spinoff Generator** program for PhD and professors.

Technomedica is a 4-month hybrid program aimed at PhD people and working specialists (engineers, doctors, VR/AR, psychologists, others) with projects in biotechnology, robotics, drones, artificial intelligence (AI), ME etc. It combines support from experienced engineers with access to mentors, labs and development centres to get to a prototype - TRL 2-4.

The program focuses on new science-based technology solutions in the field of medicine and biotechnology.



Collaborations / Partnerships areas

- Technology Transfer and knowledge exchange
- Cross Sector / Cross Industrial Collaborations
- Education and R&D
- Entrepreneurship / Spinoffs
- EU Projects Collaborations
- Development of Innovative Ecosystems
- Masterclasses and accelerator
- Investor and B2B Matchmaking events



MEMBERS



PARTNERS



Bulgarian
Innovation
Forum



CONFEDERATION
OF EMPLOYERS
AND INDUSTRIALS
IN BULGARIA

CONF OF BULGARIAN BUSINESSES



EUROPEAN CLUSTER
COLLABORATION PLATFORM



Council of European BioRegions



CENTRE OF
TECHNOLOGIES



The European Association for Biopharmaceuticals



BULGARIAN
EMPLOYERS
ASSOCIATION
INNOVATIVE
TECHNOLOGIES



МИНИСТЕРСТВО
НА ОБРАЗОВАНИЕТО
И НАУКАТА



БУХКЕРА



librebusinessgroup.org



Digital
National
Alliance



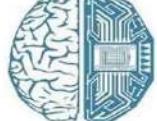
Bulgarian Entrepreneurship
& Startup Community



TSVETNOYE ECONOMICHESKOE ZNAMYA



OXENTIA



"Prof. Dr. Paraskev Stoyanov"



DISCUSSION



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