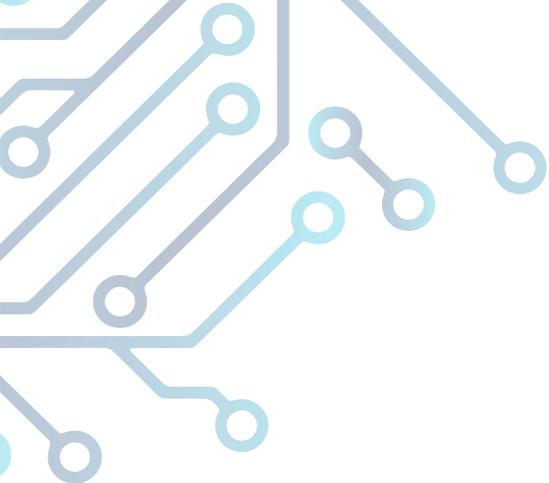


PRESENTATION OF

# 26 Collaborative Laboratories

Recognised by the FCT and monitored  
by the ANI



# CoLAB

Laboratórios Colaborativos



AGÊNCIA NACIONAL  
DE INOVAÇÃO



Fundação para a Ciência e a Tecnologia



PROGRAMA  
INTERFACE

# Collaborative Laboratories and risk sharing in promoting the science-employment relationship

Manuel Heitor, Minister of Science,  
Technology and Higher Education

July 2019

The process launched in recent years to stimulate diversification and institutional innovation, by introducing the concept of “Collaborative Laboratory”, has, as main goal, the direct and indirect creation of qualified employment in Portugal, in close association with the social and economic valorisation of knowledge. The programme has been implemented through the selection, both competitive and after evaluation by international experts, of research and innovation agendas geared towards the creation of economic and social value, including processes of internationalisation of national scientific and technological capacity, relevant intervention area(s) and conducting R&D activities that enhance synergies with scientific and higher education institutions, in particular in the context of specialised, vocational or advanced training programmes in close collaboration with social, economic and cultural partners.

In the summer of 2019, 26 laboratories were set up, as described in the following table, which correspond to initiatives in various areas of knowledge and of regional or national scope.

The main challenge that Collaborative Laboratories must address is the effective densification of the national territory in terms of knowledge-based activities, through a growing institutionalisation of forms of collaboration between science, technology and higher education institutions and economic and social stakeholders, including businesses, the hospital and health care system, cultural institutions and social organisations.

Collaborative Laboratories should therefore, and in accordance with the “Science Law” (i.e., Decree Law 60/2019 of the 16th of May 2019), consolidate and promote the capacity and potential of the scientific, academic and business communities given the opportunity to link knowledge with welfare and social and economic development in Portugal. It is the opportunity for scientific and academic institutions, in close collaboration with economic, social and cultural sectors, to contribute to the development, in Portugal, of

projects of international relevance, with an effective impact on society, stimulating the creation of qualified employment in Portugal.

Also under the “Science Law”, it is intended that the Collaborative Laboratories reinforce the current structure of technological interface centres and other intermediary institutions in Portugal, diversifying and complementing the existing structure and the performance of R&D units and Associate Laboratories, with the objective of stimulating the active participation of the scientific and academic system in the understanding and resolution of complex and large-scale problems, which are generally not capable of being solved within a single scientific, technological or institutional discipline. They imply the coordination of different scales and a business, social and cultural intervention to implement effective solutions with socio-economic impact. The Collaborative Laboratories, thus, have a complementary and supplementary role to the R&D units, including Associated Laboratories.

In this context, the development and promotion of Collaborative Laboratories should be encouraged within the framework of mobilising research and innovation agendas and programmes of international relevance and national impact, duly agreed between universities, polytechnics, R&D units and the associated laboratories, State laboratories, and the social, cultural and economic stakeholders, involving, in particular, companies, intermediary and knowledge transfer institutions, including engineering and technology centres, towards a compromise with an effective “Commitment to Knowledge and Science”, that encourages skilled employment and the creation of economic and social value, as defined under the “Interface Programme”.

The agendas should be the result of a joint and collaborative effort between public and private researchers and technicians, in close collaboration with citizens and social organisations, adopting a matrix that crosses specialisation priorities with technologies and scientific knowledge of a cross-cutting nature and defining a framework for the allocation of public and private funding for science and innovation. The aim is to mobilise the productive, social and cultural sectors in order to facilitate and strengthen the qualification of the population at territorial level by stimulating skilled employment, attracting direct foreign investment to higher added value activities and converging with the European average in terms of public and private R&D investment effort.

TABLE 1 COLLABORATIVE LABORATORIES (APPROVED BY THE FCT AND MONITORED BY THE ANI; JULY 2019)

1st EVALUATION (NOV 2017)	2nd EVALUATION (JUL 2018)	3rd EVALUATION (JUN 2019)
<ul style="list-style-type: none"> <li>• <b>DTx</b> – Digital Transformation in the Industry (Guimarães/ Matosinhos/Évora; headquarters in Guimarães)</li> <li>• <b>Atlantic</b> – Space / ocean / climate (multiple locations; headquarters in Peniche)</li> <li>• <b>ForestWISE</b> – Fires and forest (various locations; headquarters in Vila Real)</li> <li>• <b>Green Colab</b> – Seaweed processing; (Algarve; Faro)</li> <li>• <b>MORE</b> – Mountains of Research; (Northeast; Bragança)</li> <li>• <b>Vines&amp;wines</b> – Vineyard and wine; Douro Valley (Vila Real)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>AlmaScience</b> – Paper Electronics (Lisbon)</li> <li>• <b>CemLAB</b> – Cements (Aveiro)</li> <li>• <b>Value4health</b> – Medical Devices and Therapies (Lisbon)</li> <li>• <b>ProBiorefinery</b> –Biorefineries (Matosinhos)</li> <li>• <b>Net4Co2</b> – Chemical processes (Porto)</li> <li>• <b>CoLab4Food</b> – Food Products &amp; Networks</li> <li>• <b>VectorB2B</b> – Medicines and pharmaceuticals (Lisbon)</li> <li>• <b>VORTEX</b> – Cyber-Physical and Cyber-Safety Systems (headquarters in Gaia)</li> <li>• <b>COLABOR</b> – Future of work and social innovation (Headquarters in Lisbon)</li> <li>• <b>S2ul</b> – Cities and mobility (Matosinhos)</li> <li>• <b>CECOLAB (eCoLab)</b> – Circular Economy (Oliveira do Hospital)</li> <li>• <b>SFColab</b> – Smart farming; West (Torres Vedras)</li> <li>• <b>InnovPlantProtect</b> – Protection of plants; Alentejo (Elvas)</li> <li>• <b>B2E</b> –Blue economy; North (Leixões)</li> <li>• <b>Prochild</b> – Child protection and social innovation (various locations; headquarters in Guimarães)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>VG CoLAB</b> – Energy Storage (Porto)</li> <li>• <b>BUILT CoLAB</b> – Built Environment (Porto and Lisbon)</li> <li>• <b>CSESI Hub</b> –Energy Services (Lisbon)</li> <li>• <b>FOODLAB</b> – Food chain (Idanha-a-Nova)</li> <li>• <b>CoLAB InovFeed</b> – Sustainable Animal Production (Santarém)</li> </ul>

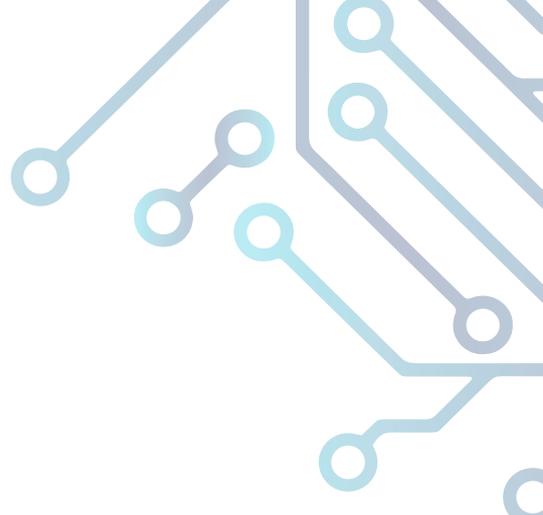
The role of these Collaborative Laboratories will be especially important in stimulating new forms of interaction and a non-linear relationship between research, innovation and social and economic development activities, by stimulating the co-responsibility of participating institutions through knowledge transfer and dissemination processes, and improving the value of products and services provided by the companies, as well as facilitating the social relevance of academic research activity and its endogenisation by society.

The establishment of Collaborative Laboratories in Portugal thus represents a new phase in the evolution and development of the research and innovation system, to reinforce the institutionalisation of collaboration between different institutions, together with the inter-institutional co-ordination of knowledge-based strategies, as well as the strengthening of the collaboration of scientific and higher education institutions with intermediary and knowledge transfer institutions, promoted in recent years. The aim is to encourage cooperation between R&D units, higher education institutions and the productive, social or cultural sector, by ensuring new ways of collaborating and

risk-sharing between the public and private sectors that foster the creation of value and of qualified employment.

Collaborative laboratory status is awarded by the Foundation for Science and Technology, FCT, for a period of five years, which is renewable following an evaluation process by international experts, to whom we owe tremendous recognition for their dedication and mobilisation over the past 3 years during the design and implementation of this concept in Portugal. I am particularly grateful to the successive FCT Governing Councils and services for organising the entire process, as well as the panel coordinated by Professor José Luis Encarnação for his tireless travels to Portugal and advice throughout the years.

I would also like to thank the ANI - National Innovation Agency, for their role in the implementation of the monitoring process of the CoLAB's activities based on international best practices.



# Collaborative Laboratories: oriented research, shared and valued knowledge

Helena Pereira, President of the  
Foundation for Science and Technology

Collaborative Laboratories (CoLAB) is a new instrument within the framework of the national scientific and technological system, integrating a policy of valorisation of knowledge and the creation of qualified and scientific employment, involving: research institutions, the interface and tech transfer centres, and the economic and social stakeholders.

The Foundation for Science and Technology (FCT) is responsible for the recognition of the title of Collaborative Laboratory, as well as for the guidelines for the CoLAB proposals and evaluation procedures, which required the submission of competitive applications and an independent international evaluation panel. The Regulations were published on September, 12, 2017, and the competition was opened on October, 2, 2017 on a permanent basis, and the Application Submission and Evaluation Guidelines were also published. As main criteria, the evaluation includes the scientific and technological merit and innovation potential of the action plan, the conditions for stimulating skilled and scientific employment, the relevance and impact of the proposed research and innovation agenda, as well as institutional organisation and diversification of funding sources. The evaluation is conducted by an independent international panel of evaluators (experts and those skilled in this type of organisations), and includes the possibility for the candidates to interact and provide clarifications if necessary.

The innovative character of the concept of CoLAB advised their public presentation and the widely attended debriefing sessions. A participatory and public process was also adopted, with the presentation of the applications and interaction with the evaluation panel. The first debriefing sessions were held on the 23rd and 24th of October 2017, and the first session for the presentation and discussion of

the applications took place on the 15th of November 2017.

To date, there have been three proposal evaluation meetings, always integrating public presentation and discussion sessions with the panel of evaluators. 26 proposals were approved by the FCT to receive the title of CoLAB: the first six proposals on the 30th of January 2018, followed by 15 new proposals on the 6th of November 2018 and now 5 proposals on the 22nd of July 2019.

At this moment when the FCT has already approved the awarding of 26 CoLAB titles, we have found that there is a great diversity in its objects and areas of activity - agriculture, forest and food, sea and climate, health, different industrial sectors including artificial intelligence, circular economy, labour and social innovation - with a national and regional impact. It is also in line with the research and innovation strategies included in the 2030 Thematic Agendas, promoted by the FCT, and built with the broad participation of the scientific and business community.

CoLAB, which must be legal entities, will be monitored on their journey by the National Innovation Agency (ANI). The FCT will keep the competition for the recognition and award of the CoLAB title open continuously until its closing date has been decided.

For the FCT, and as part of the structuring of the scientific research and technological development framework in Portugal and its financing, CoLAB represent an important pillar, integrating the component of oriented research and innovation, transfer and valorisation of knowledge. CoLAB accompanies the other instruments of the system, namely R&D Units, mechanisms for boosting scientific employment and advanced training, as well as international cooperation plans, thereby promoting complementarity and diversification.



# The consolidation of the National Innovation System through Collaborative Laboratories

Eduardo Maldonado, Chairman of the ANI's Board of Directors

The National Innovation Agency (ANI) aims to develop actions to support technological and business innovation in Portugal, contributing to the consolidation of the National Innovation System (NIS) and to strengthening the competitiveness of the national economy in global markets.

The ANI is responsible for pursuing the guidelines for a technological and business innovation strategy for Portugal, 2018-2030 (RCM 25/2018), stimulating private investment in research and development (R&D), promoting collaboration between research entities and businesses, as well as strengthening the participation in international networks and programmes by companies and entities of the scientific and technological system.

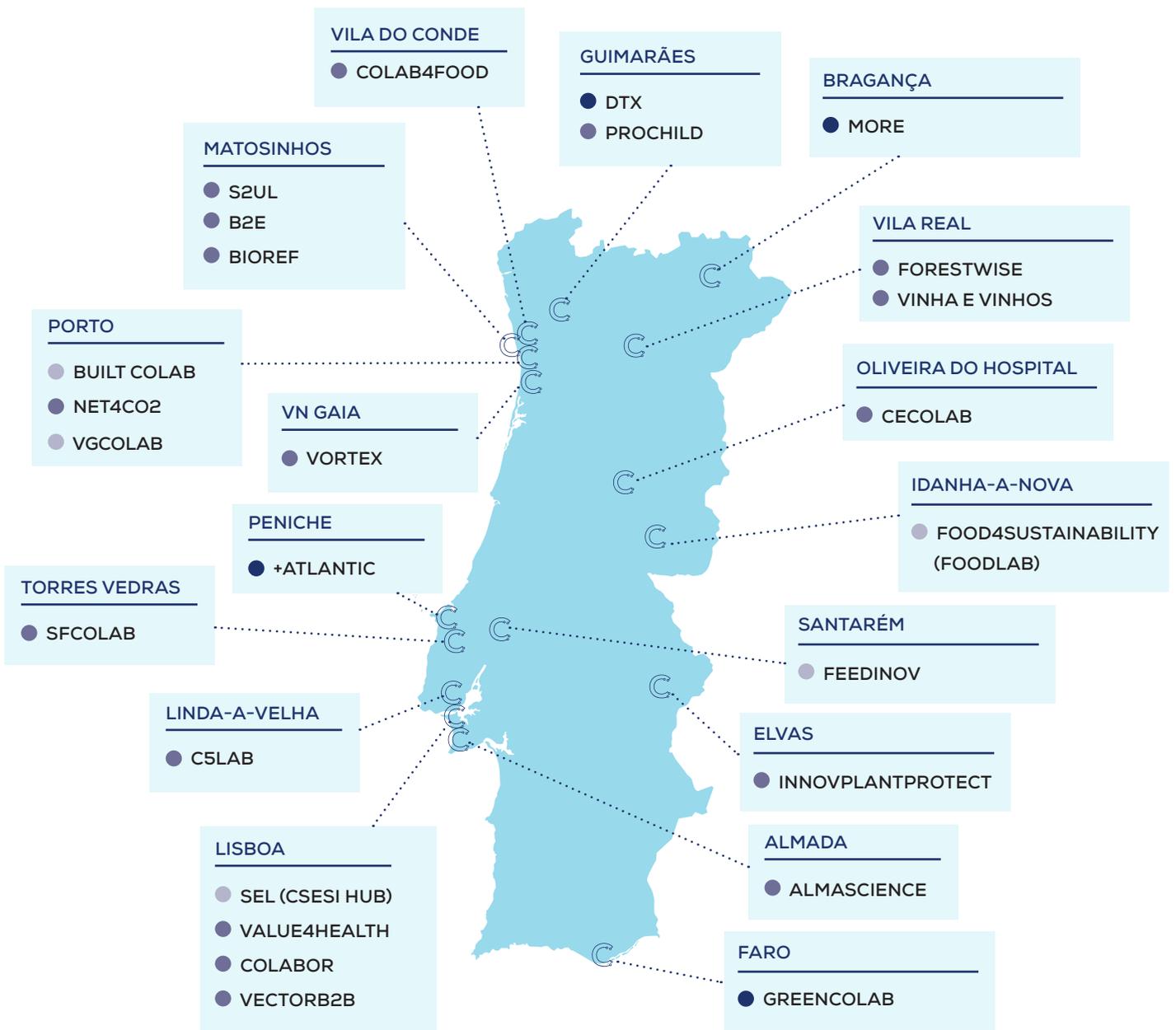
One of the challenges to increase innovation capacity in Portugal is to promote the valorisation on the market of knowledge and technologies produced by the entities of the scientific and technological system, but also to broaden the base of entities with R&D and innovation activities.

The Collaborative Laboratories (CoLAB), within the scope of the INTERFACE Programme, assume fundamental importance in this process, given its research objectives oriented to providing solutions to concrete problems of our society, mobilising and promoting the interconnections between different players and entities with different competences. The dynamics of networking and collaborative innovation will be enhanced by CoLAB's action in the coming years, not only at the national level but also in international markets.

The ANI will be an active partner of CoLAB in the coming years. Our job will be to support the CoLAB in implementing their Research and Innovation Agenda, identifying funding opportunities - both at national and Community level - in promoting their research results, in articulating with other players in the innovation system, such as Interface Centres or Clusters, as well as relevant Public Administration entities in order to meet their objectives.

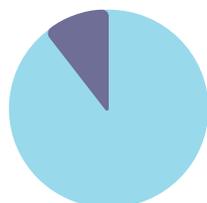
The ANI will be at the disposal of the CoLAB in the ambitious mission of placing Portugal at the forefront of the most innovative countries in the European Union.

# Collaborative Laboratories Network



● CoLAB recognised in 2017 (1st phase)    ● CoLAB recognised in 2018 (2nd phase)    ● CoLAB recognised in 2019 (3rd phase)

CoLAB - Financing of 69,15 M€ for 3 years, of which 57,6 M€ for the recruitment of Highly Qualified Human Resources



● FCT - 11.53  
● FSE+OSS - 57.62

About 600 highly qualified human resources to be recruited between 2019-2021.

# FINANCING

COLAB ACRONYM	COLAB NAME	HEAD-QUARTERS	FINANCING FOR 3 YEARS (€)	FCT ADDITIONAL CO-FINANCING 20% (€)	5 YEAR FINANCING RECOMMENDATION (€)
<b>MORE</b>	Mountains of Research Collaborative Laboratory	Bragança	2,640,000.00	528,000.00	4,400,000.00
<b>CoLAB VINES&amp;WINES</b>	Portuguese vines and wines, competitiveness and sustainability	Vila Real	840,000.00	168,000.00	1,400,000.00
<b>DTx</b>	Digital Transformation CoLab - Experiencing the future	Guimarães	4,440,000.00	888,000.00	7,400,000.00
<b>ForestWISE</b>	Collaborative Laboratory for Integrated Forest and Fire Wise Management	Vila Real	2,640,000.00	528,000.00	4,400,000.00
<b>+Atlantic</b>	Collaborative Laboratory for the Atlantic	Peniche	4,440,000.00	888,000.00	7,400,000.00
<b>GreenCoLAB</b>	Green Ocean Technologies and Products Collaborative Laboratory	Faro	1,080,000.00	216,000.00	1,800,000.00
<b>CoLABOR</b>	Collaborative Laboratory for Work, Employment and Social Protection	Lisboa	1,380,000.00	276,000.00	2,300,000.00
<b>AlmaScience</b>	Cellulose for Sustainable Smart Applications	Almada	3,000,000.00	600,000.00	5,000,000.00
<b>BIOREF (ProBiorefinery)</b>	Collaborative Laboratory for Research & Innovation on Biorefineries	Matosinhos	2,100,000.00	420,000.00	3,500,000.00
<b>C5Lab (Cemlab)</b>	Sustainable Construction Materials	Linda-a-Velha	5,160,000.00	1,032,000.00	8,600,000.00
<b>Value for Health COLAB</b>	Portuguese Value-Based Healthcare CoLAB	Lisboa	900,000.00	180,000.00	1,500,000.00
<b>CECOLAB (eCOlab)</b>	Collaborative Laboratory Towards Circular Economy	Oliveira do Hospital	2,700,000.00	540,000.00	4,500,000.00
<b>SFCoLAB</b>	Smart Farm CoLAB	Torres Vedras	1,440,000.00	288,000.00	2,400,000.00
<b>NET4CO2</b>	Network for a Sustainable CO2 Economy	Porto	990,000.00	198,000.00	1,650,000.00
<b>ProChild</b>	ProChild CoLab Against Poverty and Social Exclusion	Guimarães	1,950,000.00	390,000.00	3,250,000.00
<b>InnovPlantProtect</b>	Innovative bio-based solutions for crop protection	Elvas	2,880,000.00	576,000.00	4,800,000.00
<b>S2uL</b>	Smart and Sustainable Urban Living	Matosinhos	4,200,000.00	840,000.00	7,000,000.00
<b>CoLab4Food</b>	Collaborative Laboratory for Innovation in the Food Industry	Vila do Conde	1,500,000.00	300,000.00	2,500,000.00
<b>B2E</b>	Collaborative Laboratory for Blue Bioeconomy	Matosinhos	960,000.00	192,000.00	1,600,000.00
<b>VectorB2B</b>	Drug Developing	Lisboa	2,520,000.00	504,000.00	4,200,000.00
<b>VORTEX</b>	Collaborative Laboratory on Cyber Physical Systems and Cyber Security	Vila Nova de Gaia	1,560,000.00	312,000.00	2,600,000.00
<b>VG CoLAB</b>	Vasco da Gama CoLAB - Energy Storage	Porto	2,520,000.00	504,000.00	4,200,000.00
<b>FOOD4SUSTAINABILITY (FOODLAB)</b>	I-Danha Food CoLAB	Idanha-a-Nova	1,560,000.00	312,000.00	2,600,000.00
<b>BUILT CoLAB</b>	Collaborative Laboratory for the Future Built Environment	Porto	2,040,000.00	408,000.00	3,400,000.00
<b>SEL (CSESI HUB)</b>	Smart Energy Lab	Lisboa	1,344,000.00	268,800.00	2,240,000.00
<b>FeedInov</b>	Innovative Feed Strategies for Sustainable Animal Production	Santarém	840,000.00	168,000.00	1,400,000.00
<b>Total</b>			<b>57,624,000.00</b>	<b>11,524,800.00</b>	<b>96,040,000.00</b>

DESCRIPTION

# Collaborative Laboratories

**CoLAB**  
Laboratórios Colaborativos



## MORE - Mountains of Research Collaborative Laboratory

### DESCRIPTION

The MORE Association - Mountains of Research Collaborative Laboratory's mission is to diversify, stimulate and coordinate responses to the specific needs and challenges identified for the mountainous areas of the Mediterranean. MORE focuses its activities on creating economic and social value and meeting the following objectives:

- i) Sustainably mobilise value chains and promote unique natural locations, creating science and technology-based business opportunities;
- ii) Establish a multidisciplinary long-term mountain R&I agenda, linking scientific and academic institutions in close collaboration with economic, social and cultural actors;
- iii) Mobilise the private sector in a socio-economic and cultural context by creating new business opportunities;
- iv) Establish interface models and knowledge transfer;
- v) Diversify, stimulate and coordinate activities based on scientific knowledge;
- vi) Identify specific needs and challenges in the Mediterranean Mountain areas;
- vii) Facilitate job creation that generates economic and social value.

### CONTACTS

📍 Cidade de Léon Avenue, 506, 5301-358 Bragança

☎ +351 300 081 998 @ geral@morecolab.pt

🌐 www.morecolab.pt

### AREAS OF EXPERTISE

Food and bio-based products; Mountain environment and ecosystem management; Health, welfare, cultural heritage and tourism; Mountain cleantech.

### AFFILIATES

- Polytechnic Institute of Bragança
- ISQ - Instituto de Soldadura e Qualidade
- BLC3, Technology and Innovation campus
- Sementes Vivas
- TECPAN
- National Center for Dried Fruit Skills
- OldCare
- APPITAD
- Brigantia Ecopark
- Polytechnic of Guarda
- Northeast Waste, EIM
- Deifil
- University of Porto
- REQUIMTE



## Competitiveness and Sustainability of Portuguese Vineyards and Wines

### DESCRIPTION

CoLAB VINES & WINES' mission, promoted by ADVID and its affiliates, is to develop and communicate knowledge and technology to support the ambition expressed by the wine sector to grow 25% in export value (to reach €1 billion over the next 5 years) and to prepare and adapt the national wine system for the major challenges it faces, of which climate change is perhaps the greatest.

To this end its strategic plan is structured around two areas of activity:

1. Competitiveness through the definition and presentation of wines under the motto "PORTUGUESE, OF COURSE!".
2. Sustainability through the design and construction of a resilient system for the vineyard and wine sector under the motto "TOUGHER THAN EVER".

### CONTACTS

📍 Edifício Centro de Excelência da Vinha e do Vinho, Parque de Ciência e Tecnologia de Vila Real - Régia Douro Park, 5000-033 Vila Real

☎ +351 259 308 207 @ rosa.amador@advid.pt

🌐 www.advid.pt/vinhaevinho

### AREAS OF EXPERTISE

Vineyard: Genetic resources; zoning; soils; Intelligent and precision viticulture; territorial competitiveness - human resources, automation and perceived value; challenges related to the climate and water. Wine: oenological science for value increase and sustainability of the Wines of Portugal proposal; circular economy; environment, water and sustainability; economic and social sciences serving the sector's competitiveness and sustainability.

### AFFILIATES

Available at [www.advid.pt/sobre\\_associados](http://www.advid.pt/sobre_associados)

### DESCRIPTION

The Digital Transformation Collaborative Laboratory Association - DTx, is a private, non-profit association that develops its activity by conducting applied research in different areas associated with digital transformation.

DTx works at the intersection of the physical, digital, and cyber domains to create the next generation of evolved cyber-physical systems that blur the boundary between the real world and the virtual world.

### CONTACTS

📍 Campus de Azurém, Edifício 1, Universidade do Minho, 4800-057 Guimarães

☎ +351 253 510 045 @ info@dtx-colab.pt

🌐 www.dtx-colab.pt

### AREAS OF EXPERTISE

Digital Transformation; Cyber-physical Systems.

### AFFILIATES

- University of Minho
- University of Évora
- Universidade Católica Portuguesa
- CEiiA
- International Iberian Nanotechnology Laboratory
- Accenture
- BOSCH
- Cachapuz
- Celoplás
- Ebankit
- EMBRAER
- IKEA
- Neadvance, Intelligent Vision Systems
- NOS
- PRIMAVERA
- Grupo Simoldes
- TMG Automotive
- WeDo Technologies
- IPEC
- Graphic Computing Centre

### DESCRIPTION

ForestWISE is a non-profit, private law association that aims to develop research, innovation and knowledge transfer and technology activities to increase sustainable forest management in Portugal, the competitiveness of the Portuguese forest sector and reduce the negative consequences of rural fires.

ForestWISE will leverage existing knowledge in knowledge centres, fostering their application in solving concrete current and emerging business and community problems and meeting major societal challenges. It will work in conjunction with partners and national and international reference networks, thus ensuring the adoption of best practices and positioning itself in high TRLs \* and with a strong focus on knowledge and technology transfer.

### CONTACTS

📍 Quinta de Prados, Universidade de Trás-os-Montes e Alto Douro, 5000-103 Folhadela, Vila Real

☎ +351 259 350 489 @ contact.fw@forestwise.pt

🌐 www.forestwise.pt/pt/institution/

### AREAS OF EXPERTISE

Sustainable Forest Management; Knowledge and Technology Transfer.

### AFFILIATES

- Altri Florestal
- Amorim Florestal
- EDP Distribution
- DS Smith Paper Viana
- REN
- Sonae Arauco
- The Navigator Company
- INESC TEC - Institute for Systems and Computer Engineering, Technology and Science
- Higher Institute of Agronomy
- University of Lisbon
- University of Aveiro
- University of Coimbra
- University of Évora
- University of Trás-os-Montes and Alto Douro.
- Agency for Integrated Rural Fire Management (AGIF)
- National Institute of Agricultural and Veterinary Research (INIAV)



## The Atlantic Collaborative Laboratory

### DESCRIPTION

+ Atlantic aims to develop knowledge about the interactions between the Ocean, Atmosphere, Climate and Energy in the Atlantic through an integrated “deep sea to space” approach. By promoting the development of the blue economy and highly skilled employment from a sustainable resource perspective, + Atlantic contributes to the full realisation of the ocean’s potential for society by focusing its activity on advanced research into space, ocean and energy technologies, complemented with data science techniques, leveraging the development and implementation of new maritime infrastructures and platforms that will constitute new data sources for the Atlantic and the creation of synergies between the scientific and technological approach and the market approach.

### CONTACTS

- ✉ Molhe Leste, 2520-620 Peniche
- @ colab.atlantic@gmail.com
- 🌐 www.colabatlantic.com

### AREAS OF EXPERTISE

Ocean; Atmosphere; Climate; Energy.

### AFFILIATES

- WavEC Offshore Renewables – Offshore Energy Centre
- ABYSSAL, S.A.
- ASSOCIAÇÃO RAEGE AÇORES – Atlantic Network of Geodynamic and Space Stations
- CEiiA
- Deimos Engenharia S.A.
- EDISOFT – Empresa de Serviços e Desenvolvimento de Software S.A.
- GMVIS SKYSOFT, S.A.
- Hidromod – Modelação em Engenharia, Lda.
- ISQ – Instituto de Soldadura e Qualidade
- IST – Instituto Superior Técnico
- TEKEVER ASDS, Lda.
- University of Porto
- ASM Industries, S.A.



## Development of Ocean Green Technologies and Products Collaborative Laboratory

### DESCRIPTION

GreenCoLAB aims to be a catalyst for sustainability and economic performance by bringing together the interests of the scientific community and industry, driving innovation and economic diversification in the field of seaweed biotechnology.

Its research and innovation agenda is based on two phases.

- Development of biological resources and characterisation of biomass and downstream processing;
- Development of new products and markets. GreenCoLAB will develop its activities in a bottom-up approach by leveraging resources and developing the necessary efforts to establish strategies to accelerate industrial and market development in priority areas, such as food and feed, sequestration and mitigation of CO<sub>2</sub>, waste water treatment and use of bio-fertilisers for soil recovery.

### CONTACTS

- ✉ Centro de Ciências do Mar, Universidade do Algarve, Campus de Gambelas, Edf. 7, 8005-139 Faro
- ☎ +351 917 381 001 @ greencolab.laboratorio@gmail.com
- 🌐 www.ccmr.ualg.pt/page/greencolab

### AREAS OF EXPERTISE

Seaweed biotechnology; Development of new products.

### AFFILIATES

- Sea Sciences Centre
- National Energy and Geology Laboratory
- Allmicroalgae – Natural Products, S.A.
- Necton – Companhia Portuguesa de Culturas Marinhas S.A.
- Algaplus – Produção e Comercialização de Algas e seus Derivados, Lda.
- SPAROS, Lda.



## Labour, Employment and Social Protection Collaborative Laboratory

### DESCRIPTION

The Labour, Employment and Social Protection Collaborative Laboratory (CoLABOR) mobilises resources from academia, companies, public administration and organisations from the social and solidarity economy with a view to deepening knowledge of present and anticipated problems around 3 areas of activity: a) work and employment; b) social protection; c) social and solidarity economy.

CoLABOR aims to develop activities that promote a better understanding of these realities, to design policy responses (public and organisational) adapted to the new labour market and social protection contexts, studying and acting on the reconfiguration of organisations in which innovation technology will have the most influence.

### CONTACTS

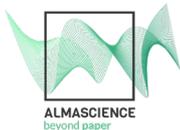
- 📍 Rua das Taipas, 1, 1250-092 Lisboa
- ☎ +351 919 811 971
- ✉ geral@colabor.pt
- 🌐 www.colabor.pt

### AREAS OF EXPERTISE

Labour; Employment; Social protection; Public Policy Evaluation.

### AFFILIATES

- University of Coimbra Centre for Social Studies
- Delta Cafés – Sociedade Gestora de Participações Sociais, S.A.
- National Confederation of Solidarity Institutions
- MOTA-ENGIL, SGPS, S.A.
- SONAE Corporate, S.A.
- Santa Casa da Misericórdia de Lisboa
- Strategy and Planning Office, Ministry of Labour, Solidarity and Social Security
- University Institute of Lisbon, ISCTE-IUL / CIES-IUL
- Institute for Economic, Financial and Tax Law



## Cellulose Research and Development for Smart and Sustainable Applications

### DESCRIPTION

AlmaScience's main objective is to carry out cellulose research and innovation activities for sustainable and intelligent applications and proposes to develop scientific activities and knowledge transfer and valorisation through its five thematic lines:

1. Paper manufacturing and its modification;
2. Development and integration of intelligent systems;
3. Platforms and bio-sensors for smart diagnostics, with special emphasis on health care delivery;
4. Modelling, design and architecture of systems;
5. Building Blocks-Materials and devices.

It, therefore, aims to bridge the gap between academy-based ideas and their applications in the industrial sector in order to quickly track the exploration of products to be developed. Its activities will be developed in two distinct hubs located in Aveiro and Almada.

### CONTACTS

- 📍 Campus de Caparica, 2829-516 Almada
- ☎ +351 217 810 870
- ✉ global@almascience.pt
- 🌐 www.almascience.pt

### AREAS OF EXPERTISE

Cellulose for smart and sustainable applications.

### AFFILIATES

- INCM - Imprensa Nacional – Casa da Moeda, S.A.
- The Navigator Company, S.A.
- Clara Saúde, Lda.
- Raiz – Forest and Paper Research Institute
- Fraunhofer Research Association Portugal
- NOVAidFCT – Association for the Innovation and Development of the FST
- Universidade Nova de Lisboa

### DESCRIPTION

The BIOREF Association – Collaborative Laboratory for Biorefineries was formed with the aim of becoming Portugal’s benchmark scientific and technological entity to support both the implementation of the National Plan for the Promotion of Biorefineries – Horizon 2030 (PNPB) and the new European Bioeconomy Strategy.

For this purpose, 5 priority axes for innovation activities were defined and included in the R&I Agenda:

1. Create technological and market conditions for the production and sustainable use of renewable gases (methane, hydrogen) in the transport sector;
2. Create technological and market conditions for the use of biomass thermo-chemical conversion technologies (e.g. pyrolysis, hydrothermal liquefaction and gasification) for commercial applications (renewable gases, energy, liquid biofuels);
3. To create technological conditions for the commercial viability of bio-refineries with added value bioproducts from different residual biomasses;
4. Create technological conditions for the commercial viability of using biomass, in particular microalgae, in biorefineries of liquid biofuels, in particular aviation;
5. Development of purification and downstream processing methodologies for industrial products derived from biomass.

### CONTACTS

✉ L.J. CTT, S MAMEDE DE INFESTA, Apartado 1089  
4466-901 São Mamede de Infesta

☎ +351 210 924 721 @ colabbioeref@lneg.pt

🌐 www.bioref-colab.pt/pt

### AREAS OF EXPERTISE

Bio-refineries; Bio-energy; Bio-products.

### AFFILIATES

- National Energy and Geology Laboratory, I.P.
- IST - Instituto Superior Técnico
- University of Minho
- Universidade Nova de Lisboa
- University of Porto
- University of Aveiro
- Faculty of Sciences of the University of Lisbon
- Polytechnic Institute of Portalegre
- BIOTREND, S.A.
- University of Trás-os-Montes and Alto Douro
- TAP-Air Portugal
- Raiz – Forest and Paper Research Institute A4F, Alga Fuel S.A.
- BIO DOUROGÁS – Produtora de Gás e Combustível Gás, S.A.
- BLC3 Evolution, Lda.
- TRATOLIXO – Waste Solids Treatment EIM
- SYSADVANCE – Sistemas de Engenharia S.A.
- PETROGAL S.A.
- SOLVAY Portugal – Produtos Químicos S.A.

### DESCRIPTION

C5Lab intends to develop research and development activities to reduce carbon dioxide emissions from the cement industry, in order to contribute to the carbon neutrality of the national economy. Based on a holistic approach, its main objective is to develop innovative technologies for the sustainable production of cement, mortar and concrete focused on reducing carbon footprint. The carbon footprint reduction will be achieved throughout the complete industry value chain, from the cement plant quarry to the end of life of the concrete structures and their recycling. In this regard, various links in this industry’s production chain will be investigated, such as raw materials and alternative fuels, CO2 capture and use (CCUS), conversion of CO2 into synthetic fuels and chemicals, renewable energy and energy efficiency, eco-efficient concrete, new cementitious materials, among others.

### CONTACTS

✉ Edifício Central Park, Rua Central Park, 6, Linda-a-Velha

☎ +351 213 510 830 @ geral@c5lab.pt

🌐 www.c5lab.pt

### AREAS OF EXPERTISE

CO2 capture and recovery; Energy Efficiency and Transition; Sustainable Cementitious Materials.

### AFFILIATES

- Technical Association of the Cement Industry
- CIMPOR
- SECIL
- IST - Instituto Superior Técnico
- LNEC - Laboratório Nacional de Engenharia Civil

### DESCRIPTION

Value for Health focuses on technology innovation to objectively monitor health outcomes and support patient literacy. In practice, this CoLAB will allow patients to be monitored remotely and through technology, whose clinical outcomes will be analysed and the impact of interventions and their cost-effectiveness will be assessed.

This CoLAB will be responsible for including these methodologies in clinical training and will seek to innovate by developing new technologies that have a real impact on health practices, generating spin-off companies, as well as new business sectors in the health industry. In a long term perspective, this laboratory will level the implementation of innovative Value Based Healthcare models in Portugal, presenting itself as an international reference in this field.

### CONTACTS

✉ Universidade Nova de Lisboa, Campus de Campolide, 1099-085 Lisboa

@ ana.londral@vohcolab.org

🌐 www.vohcolab.org

### AREAS OF EXPERTISE

Value Based Healthcare.

### AFFILIATES

- Universidade Nova de Lisboa
- José de Mello Saúde
- Vodafone
- Fraunhofer – Portugal



### DESCRIPTION

ECOLab's corporate purpose is to carry out research and experimental development activities, testing, training, knowledge and technology transfer, consulting and service provision in the fields of industrial biotechnology; sustainable separation processes and green chemistry; Ecodesign; Consultancy in Social and Economic Sciences applied to the Circular Economy; entrepreneurship, innovation and economic development; protection of the environment and natural heritage; Industrial ecology; Industrial and regional symbioses; Integrated planning; Promotion and awareness of the efficient and intelligent use of resources and development of economic dynamics and metabolism in the concept of Circular Economy; computer science and code development; data manipulation, analysis, display and modelling of data, in particular on a large scale; and in any other sectors of knowledge and research that may be considered important and of general interest for the development of the Circular Economy and the positioning of the Portuguese socio-economic fabric and COLAB on a national and international level.

The Circular Economy CoLab will operate on three technology platforms - industrial biotechnology, sustainable separation processes and green chemistry and eco-design - and will impact the value chains of forest, agro-industry and urban, water, industrial manufacturing, construction and services waste.

### CONTACTS

✉ Incubadora BLC3, Rua Nossa Senhora da Conceição, 2, 3405-155 Lagares

☎ +351 238 641 059 @ circular@cecolab.pt 🌐 www.cecolab.pt

### AREAS OF EXPERTISE

Circular Economy; Industrial Biotechnology; Eco-design.

### AFFILIATES

- BLC3 Evolution
- The Navigator Company
- Lipor
- MotaEngil
- Aquitex
- TMG
- ISQ - Instituto de Soldadura e Qualidade
- National Energy and Geology Laboratory
- University of Aveiro
- Universidade Católica Portuguesa
- University of Coimbra
- University of Minho
- Universidade Nova de Lisboa
- University of Porto



## Digital Innovation in Agriculture Collaborative Laboratory

### DESCRIPTION

Smart Farm COLAB was founded with the mission of being a hub for innovative and automated digital solutions for efficient resource management and for maximising the added value of national horticulture, fruit and viticulture products. Aiming to contribute to improving the performance of agricultural activity, it structures its activities around the development of smart and sustainable agriculture, combining a component of applied science and a strong presence of companies from the sectors involved to respond to advances in agricultural production and management, but also the training and employability needs in the sector.

### CONTACTS

📍 Rua Cândido dos Reis n. 91, 2560-312 Torres Vedras

✉️ [empresas@cm-tvedras.pt](mailto:empresas@cm-tvedras.pt)

🌐 [pt.sfcollab.org](http://pt.sfcollab.org)

### AREAS OF EXPERTISE

Management, Plant Biology, Agronomy, Sustainable Use of Resources, Electronics and Sensors, Robotics and Automation, Artificial Intelligence, Informatics, Tourism, Marketing, Social Sciences and Education.

### AFFILIATES

- Municipality of Torres Vedras
- Faculty of Sciences and Technology of the Universidade Nova de Lisboa
- Faculty of Sciences of the University of Lisbon
- Polytechnic of Leiria
- ISCTE - University Institute of Lisbon
- National Institute of Agricultural and Veterinary Research, I.P.
- São Mamede da Ventosa Cooperative Winery
- Tomix - Industrial and Agricultural Equipments Industry
- Stagric
- COTHN - National Horticultural Operative and Technological Centre
- Fernando Barros Leal Professional Agricultural School
- Luís Vicente
- Optimizeplanet
- Quinta do Pinto - Commercial Agriculture Society
- SGS Portugal



## Network for a Sustainable CO<sub>2</sub> Economy

### DESCRIPTION

CoLAB Net4CO<sub>2</sub> is a new network of R&D and new technology competencies designed to create new processes and products that contribute significantly to a sustainable CO<sub>2</sub> circular economy. The six entities that make up NET4CO<sub>2</sub> have aligned themselves on a common strategy for developing a process and product group that contributes to solving the carbon capture and separation problem, as well as enhancing CO<sub>2</sub> through its reuse for the synthesis of synthetic fuels.

The main long term achievements of the creation of CoLAB Net4CO<sub>2</sub> are:

To strengthen and exploit the synergies established between the industry, namely Galp, universities and the scientific community;

Attract highly-skilled human resources and create skilled jobs, especially for young graduates, enabling them to develop their knowledge within a sustainable and innovation-focused work perspective;

Develop new global technologies of national origin to promote the evolution of the future energy mix in a sustainable global environment.

### CONTACTS

📍 UPTEC Asprela II, Parque de Ciência e Tecnologia da Universidade do Porto, Rua Doutor Júlio de Matos, 828/882, 4200-355 Porto, Portugal

☎️ +351 220 731 349 ✉️ [info@net4co2.pt](mailto:info@net4co2.pt)

🌐 [www.net4co2.pt](http://www.net4co2.pt)

### AREAS OF EXPERTISE

Carbon capture and sequestration; CO<sub>2</sub> Circular Economy.

### AFFILIATES

- GALP Energia S.A.
- University of Porto
- IST - Instituto Superior Técnico
- REQUIMTE - Chemical and Technology Network
- International Iberian Nanotechnology Laboratory
- Change Partners, SCR, S.A.

**DESCRIPTION**

ProChild CoLAB aims to combat childhood poverty and social exclusion, based on a multidisciplinary scientific approach around two major areas: Social Intervention and Technological Development. The Social Intervention area includes four strategic axes, each with specific projects, implemented in specific territories:

- i) Health and Wellbeing;
- ii) Development and Education;
- iii) Social Participation, Citizenship and Gender Equality;
- iv) Protection from Violence, Exploitation, Abuse and Neglect.

These axes are linked to the transversal strategic area of technological development and innovation, in the fields of Digital Technology and Nanotechnology

ProChild CoLAB thus seeks to promote effective social change, in the alliance between social intervention and technological innovation not only in the production of scientific knowledge, but also in the construction and dissemination of intervention programs and technological products that respond to the needs of children, families, professionals and institutions.

**CONTACTS**

-  R. de Vila Verde 1, 4810-451 Guimarães
-  [prochild@psi.uminho.pt](mailto:prochild@psi.uminho.pt)
-  [www.prochildcolab.pt](http://www.prochildcolab.pt)

**AREAS OF EXPERTISE**

Poverty; Social Exclusion; Digital Technology; Nanotechnology.

**AFFILIATES**

- University of Minho
- University of Porto
- University of Aveiro
- University of Coimbra
- Centre for Social Studies
- Faculty of Psychology of the University of Lisbon
- Lisbon School of Economics and Management
- Universidade Nova de Lisboa
- Universidade Católica Portuguesa
- SONAE
- Rodrigues Brothers
- Grupo DST
- Santa Casa da Misericórdia de Lisboa
- Vasco Vieira de Almeida Foundation
- Graphic Computing Centre (CCG)
- Municipality of Guimarães (awaiting approval)



**Innovative bio-based solutions for crop protection**

**DESCRIPTION**

InnovPlantProtect aims to develop innovative, bio-based solutions to promote safer, smarter, more productive, climate-resistant, and more environmentally friendly crops, specifically:

New bio-pesticides against pests and diseases (of Mediterranean relevance);

New plant ideotypes;

Diagnostic and monitoring methods; Risk and pesticide application models.

The impact of its activities will focus on the development of products and services (new bio-pesticides and resistant plants; new models and methods for diagnosis and monitoring), specifically contributing to environmental sustainability, land densification, the creation of skilled jobs and investment attraction.

**CONTACTS**

-  Estrada Gil Vaz, 7350-478 Elvas  +351 962 909 797
-  [innovplantprotect@itqb.unl.pt](mailto:innovplantprotect@itqb.unl.pt)
-  [www.itqb.unl.pt/research/colab/innovplantprotect](http://www.itqb.unl.pt/research/colab/innovplantprotect)

**AREAS OF EXPERTISE**

Bio-pesticides; New plant ideotypes; Diagnostic and monitoring methods; Risk and pesticide application models.

**AFFILIATES**

- Universidade Nova de Lisboa
- National Institute of Agricultural and Veterinary Research, I.P.
- Bayer CropScience Portugal
- Syngenta CropProtection
- Elvas Town Hall
- University of Évora
- CEBAL - Alentejo Agricultural and Agri-Food Biotechnology Centre
- Anpromis
- ANPOC
- FNOP
- Casa do Arroz
- Fertiprado

**DESCRIPTION**

S2UL aims to accelerate the transformation of cities into smart and sustainable urban ecosystems, helping to promote citizens' quality of life. The pursuit of this vision will be achieved by: i) developing knowledge to understand and address complex societal urban challenges; ii) explore opportunities arising from the integration of the physical, digital and social worlds, leveraged by increasing connectivity and disruptive technologies; iii) generate, test and market advanced solutions based on sustainability principles and user centric design.

Seeking a mixed approach to technology-push and market-pull, S2UL aims to develop not only knowledge and new technological solutions, but also their implementation in the urban fabric, in collaboration with their business partners. In this context, the prospective laboratory's research and development activities will focus on integrating data science and physical engineering programmes to create innovative products and product systems increasingly used as services - the so-called "4th Industrial Revolution".

**CONTACTS**

- ✉ Av. D. Afonso Henriques, 1825, 4450-017 Matosinhos
- ☎ +351 220 164 800 @ frederico.custodio@ceiia.com
- 🌐 [www.ceiia.com/colab-s2l](http://www.ceiia.com/colab-s2l)

**AREAS OF EXPERTISE**

Data science; physical Engineering; Smart and sustainable urban ecosystems.

**AFFILIATES**

- CEiIA
- University of Minho
- IST - Instituto Superior Técnico
- University of Lisbon
- Efacec Electric Mobility, S.A.
- Fraunhofer Research Association Portugal
- NOS Comunicações, S.A.
- Vieira de Almeida & Associados - Soc. Advogados, SP, RL
- Deloitte Consultores, S.A.
- Municipality of Lisbon
- Frente Atlântica (Municipalities of Porto, Matosinhos and Vila Nova de Gaia)

**Food Industry Innovation Collaborative Laboratory****DESCRIPTION**

CoLab4Food aims to contribute to a paradigm shift in the structure of collaboration between the various food sector stakeholders, promoting its sustainability and strengthening its economic importance in Portugal.

Based on three main pillars - Food Security and Sustainability; Food for health and wellbeing; and Safe, high quality food - CoLab4Food consolidates its Research and Innovation Agenda around the following strategic objectives:

To develop innovative processes and products that meet the demands of the market and the consumers, namely: that they are safe and have a high quality standard; contribute to the well-being and health of consumers; and ensure, in an integrated manner, the efficient and sustainable use of resources, including waste, enabling the implementation of a circular economy system;

To enhance and increase the research, transfer and valorisation of technology in the food sector;

To strengthen the innovation and technological capacity of the sector;

To increase collaboration and create synergies between all entities that act in the sector, contributing to the creation of a collaborative culture;

To increase the capacity and expertise of the national scientific and technological system to meet future industry needs.

**CONTACTS**

- ✉ Rua dos Lagidos, 4485-655 Vila do Conde
- ✉ [geral@colab4food.com](mailto:geral@colab4food.com)

**AREAS OF EXPERTISE**

Food Security and Sustainability; Food for health and well-being; Safe, high quality food.

**AFFILIATES**

- Integralar Association - Intervention of Excellence in the Agrifood Sector
- National Institute of Agricultural and Veterinary Research, I.P.
- REQUIMTE - Chemical and Technology Network
- University of Porto
- University of Minho
- University of Lisbon - ISA
- Universidade Católica Portuguesa - Centre for Biotechnology and Fine Chemistry
- University of Trás-os-Montes and Alto Douro
- Frulact Indústria Agro-Alimentar, S.A.
- SUMOL+COMPAL Marcas, S.A.
- Grupo Primor S.A.
- Sense Test - Sociedade de estudos de análise sensorial a produtos alimentares, Lda.
- SUPER BOCK BEBIDAS S.A.
- Mendes Gonçalves S.A.



## Collaborative Laboratory for Blue Bioeconomy

### DESCRIPTION

Under the motto "Ocean-Inspired - Market Driven - Knowledge Fuelled" CoLAB B2E aims to promote the creation of highly skilled jobs that will actively contribute to increasing the economic and social value of products and services, based on new and existing biological processes, including processes of internationalisation of national scientific and technological capacity, thereby supporting two of the blue growth sectors with the most potential: biotechnology and aquaculture.

B2E will pursue its objectives based on the following axes of action: (i) market dynamics for sector products, (ii) knowledge sharing and transfer, (iii) internationalisation, and (iv) funding for the Blue Bioeconomy sector.

### CONTACTS

📍 Avenida da Liberdade, s/n, 4450-718 Matosinhos

✉️ b2e@b2e.pt

### AREAS OF EXPERTISE

Marine living natural resources; Marine biotechnology; Sustainable aquaculture; Animal Health, Nutrition and Welfare; Human Health, Nutrition and Well-being.

### AFFILIATES

- Sorgal – Sociedade de Óleos e Rações S.A.
- Savinor – Sociedade Avícola do Norte S.A.
- Sonae MC – Serviços Partilhados, S.A.
- A20 – Água, Ambiente e Organização Ld.ª
- Sparos, I&D, Nutrição em Aquacultura Ld.ª
- Ingredient Odyssey Ld.ª
- Safistela – Sustainable Aqua Farming Investments S.A.
- Interdisciplinary Centre for Marine and Environmental Research (CIIMAR)
- University of Aveiro - Center for Environment and Sea Studies (CESAM)
- University of Minho - ICVS/3Bs
- University of Porto
- INESC TEC - Institute for Systems and Computer Engineering, Technology and Science
- Fórum Oceano – Sea Economy Association



## Drug Developing

### DESCRIPTION

VectorB2B - Drug Developing - Biotechnology Research Association's mission is to provide highly qualified drug discovery and development services from the research bench to the patient and the client. This Lab will be a one-stop shop for other companies and academic institutions involved in the discovery and development of biological medicines, providing highly qualified bench-to-patient (B2B) services. VectorB2B aims to bring together: (i) highly qualified human resources in Portugal with knowledge and experience in the discovery and development of biological drugs, (ii) instrumental power in pharmacodynamic and pharmacokinetic analysis and testing, and (iii) cross-cutting services such as systematic reviews, project planning and statistical decision evaluation. It will provide specialised services such as antibody screening, in vitro and in vivo efficacy assays in areas such as ophthalmology, oncology, CNS; GMP process development and production services (good manufacturing practices).

### CONTACTS

📍 Avenida Professor Egas Moniz, Edifício Egas Moniz, piso 2, Sala A8, 1649-028 Lisboa

✉️ scortereal@vectorb2b.com

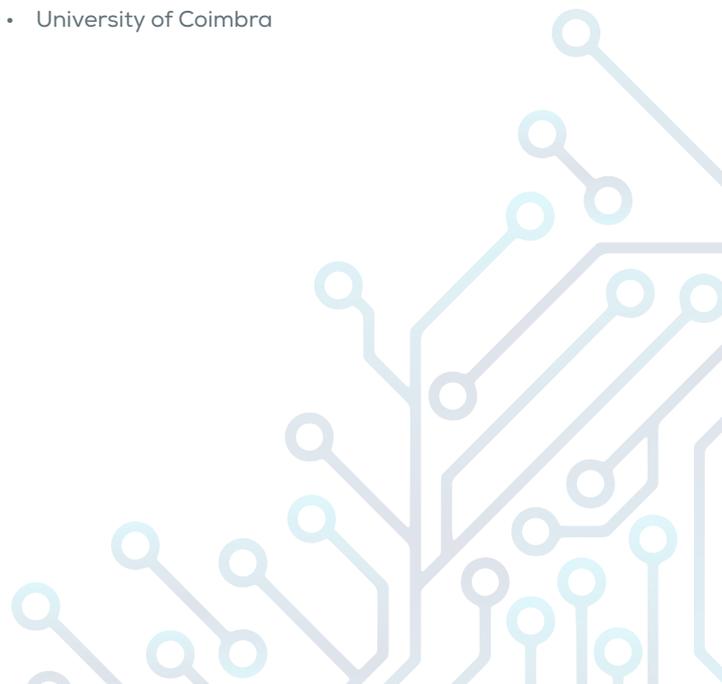
🌐 www.vectorb2b.com

### AREAS OF EXPERTISE

Discovery and development of biological medicines.

### AFFILIATES

- Technophage, S.A.
- Laboratório Medifar S.A.
- BEVAG
- Faculty of Medicine of the University of Lisbon
- Faculty of Pharmacy of the University of Lisbon
- Faculty of Veterinary Medicine of the University of Lisbon
- University of Coimbra



## DESCRIPTION

Combining the potential of academic and industry research models, Vortex aims to become the largest hub for accelerating innovation and knowledge and technology transfer in the areas of cyber-security and cyber-physical systems on an international scale. In this way, Vortex will actively contribute to accelerating innovation and the development of cutting-edge technologies, closing the current gap between research institutions, public laboratories, industry, the market, the economy and society.

Promoting innovation acceleration programmes that are capable of streamlining the transfer of the most fundamental research and development carried out in academic institutions (TRL 1-3), their incorporation through experimental development in partnership with business entities (TRL 4-7), with a view to its preparation for rapid and efficient market introduction (TRL 8-9), thus valuing the entire chain of generating new scientific knowledge and creating technological value.

## CONTACTS

📍 Rua Serpa Pinto, nº 28, 44G e 44F, 4400-307 Vila Nova de Gaia

☎ +351 210 331 600

@ rodrigo.maia@altran.com 🌐 www.vortex-colab.com

## AREAS OF EXPERTISE

Cyber-security and Cyber-Physical Systems; new device conception services.

## AFFILIATES

- Altran Portugal
- Universidade Nova de Lisboa
- Porto Higher Institute of Engineering/Porto Polytechnic Institute (ISEP/IPP)
- INESC TEC - Institute for Systems and Computer Engineering, Technology and Science
- Beta-i

## DESCRIPTION

VG-CoLAB - Energy Storage is focused on providing high technology services and value added products, as well as innovative solutions for its partners and the market in the field of electrochemical energy storage. It thus aims to contribute to the implementation of the European energy transition agendas by providing for the development of world leading energy transition technologies and solutions. VG CoLAB is designed to support research, development and innovation and the creation of scientific jobs by addressing key R&D topics that will boost the Portuguese economy.

## CONTACTS

📍 Porto

@ mendes@fe.up.pt

## AREAS OF EXPERTISE

Electrochemical energy storage; Electronic conversion of energy; Intelligent energy management.

## AFFILIATES

- Efacec Energia - Electrical Machines and Equipment. S.A.
- University of Porto
- IST - Instituto Superior Técnico
- INESC TEC - Institute for Systems and Computer Engineering, Technology and Science
- Intertek Portugal, Unipessoal, Lda.
- Charge2C-NewCap Lda. - C2C-NewCap
- EDP Innovation, S.A.
- A400 Projetistas e Consultores de Engenharia, Lda.
- UPTEC - Associação de Transferência de Tecnologia da Asprela



## FOOD4SUSTAINABILITY

### DESCRIPTION

FOOD4SUSTAINABILITY will facilitate the adoption of innovative and healthy food production systems by reusing agricultural and food waste as a raw material, combining new and/or traditional innovative techniques and facilitating their adoption and dissemination. In order to contribute to the sustainable use of the planet, I-Danha Food CoLAB aims to develop food systems based on biological products (e.g. fish, algae, vegetables) for climate resilience (e.g. energy used from solar panels, precision agriculture controls, smart irrigation). The drastic reduction in CO2 emissions will be achieved through the use of biogenic inputs for the greenhouse. Simultaneously, inputs to the land bank will be produced from the greenhouse such as fish and insect proteins, algae, organic fertilisers and filtered water.

### CONTACTS

✉ Centro Empresarial de Idanha-a-Nova, Zona Industrial, 6060-182 Idanha-a-Nova

@ goncalo.amorim@bgi.pt

### AREAS OF EXPERTISE

Sustainable agriculture; Climate.

### AFFILIATES

- BGI SA
- Polytechnic Institute of Castelo Branco
- University of Beira Interior
- Polytechnic of Guarda
- Idanha-a-Nova Municipal Center for Culture and Development
- ISCTE
- Hortas D'Idanha, S.A.
- SILVAPOR
- Beira Baixa Business Association
- LIVING SEEDS SEMENTES VIVAS, S.A.
- Agricultural Cooperative of Ladoeiro Olive Growers, C.R.L.
- Raia Biological Producers Association
- Montes da Raia, Idanha-a-Nova Cattle and Sheep Producers Association
- Grupo Vera Cruz
- Polytechnic of Viseu
- IBERPONICS Lda.
- BLUEGROWTH, Lda.
- Beira Interior Olive Oil Producers Association
- SENSEFINITY, Lda.

## BUILT CoLAB

## Built Environment for the Collaborative Laboratory of the Future

### DESCRIPTION

BUILT CoLAB aims to develop innovative solutions for adaptable, intelligent, resilient, sustainable infrastructures and buildings. To this end, the academic community, research organisations, industry and end users will meet in a collaborative environment, leading to a common model of value creation that will contribute to the transformation of the Architecture, Engineering and Construction sector. BUILT CoLAB aims to cover the life cycle of the built environment, including architecture, design and data driven manufacturing, promoting the digitisation of the entire ecosystem, based on the BIM methodology and technologies that promote the use of digital twin, in a factory environment or shipyard, in the management and maintenance of infrastructure and buildings and, finally, deconstruction and recycling. The contribution to the industrial renaissance of the future is also based on promoting the modularisation of building construction from the design stage, integration of robotisation and 3D printing in factory production, ending in the development of innovative technologies for on-site assembly.

### CONTACTS

✉ Rua de Álvares Cabral 306, 4050-040 Porto

@ geral@builtcolab.pt 🌐 www.builtcolab.pt

### AREAS OF EXPERTISE

Architecture; Engineering; Construction.

### AFFILIATES

- Portuguese Technological Platform of Construction
- Drivers – Engineering, Innovation and the Environment
- IST - Instituto Superior Técnico
- INESC TEC - Institute for Systems and Computer Engineering, Technology and Science
- Higher Institute of Engineering of Lisbon
- Increase Estimate, Lda.
- Portuguese Railway Platform
- Teixeira Duarte, S.A.
- Infraestruturas de Portugal, S.A.
- National Civil Engineering Laboratory
- Waters of Porto, EM Water Company of the Municipality of Porto
- Faculty of Engineering, University of Porto
- Construction and Public Works Industries Association
- Mota-Engil Engenharia e Construção, S.A.
- University of Minho
- Administração dos Portos do Douro, Leixões e Viana do Castelo, S.A.
- ArchiTrope Consortium



## CoLAB Smart Energy Lab

### DESCRIPTION

SEL aims to fill a gap in the academic/industrial energy ecosystem with the aim of finding solutions that help the energy transition process of energy users. This CoLAB's research and innovation agenda emerges from the development and convergence of knowledge about key verticals in the industry, along with key multidisciplinary skills, including:

- Industry Verticals: The distributed Management of Energy Resources; Power management; Flexibility; Storage; Mobility;
- Horizontals: Engineering; IoT; Computer hardware and software; Big Data and Artificial Intelligence; Cyber security; Service Design and Design Thinking; UX/UI.

### CONTACTS

📍 Avenida 24 de Julho, nº 12, 1249-300 Lisboa

☎ +351 916 270 003

@ joao.wang@smartenergylab.pt

### AREAS OF EXPERTISE

New energy management systems.

### AFFILIATES

- EDP Comercial, Comercialização de Energia S.A
- Faculty of Sciences of the University of Lisbon
- INESC-ID
- IST - Instituto Superior Técnico
- INESC TEC - Institute for Systems and Computer Engineering, Technology and Science
- University of Coimbra
- Accenture, Consultores de Gestão S.A.

## FeedInov

## Innovative Feeding Strategies for Sustainable Animal Production

### DESCRIPTION

FeedInov CoLAB aims to improve safety along the food chain, with an impact on the safety of animal products, increasing consumer confidence in national production and reinforcing the role of the animal feed industry in the production of healthy, sustainable and environmentally friendly products. FeedInov CoLAB's strategy and motivation are based around four main topics:

1. Analysis of trends in meat consumption;
2. Optimising the efficiency of nutrient resources;
3. Healthy animals for healthy humans;
4. Socially responsible livestock from a nutritional perspective, reducing yours in the environment.

InovFeed CoLAB also aims to promote an integrated view of the value chain, through the innovative capacity of the feed industry, to increase resource efficiency, minimize its environmental impact and enhance the use of by-products from other industries.

### CONTACTS

📍 Estação Zootécnica Nacional (INIAV Santarém) Quinta da Fonte Boa 2005-048 Vale de Santarém

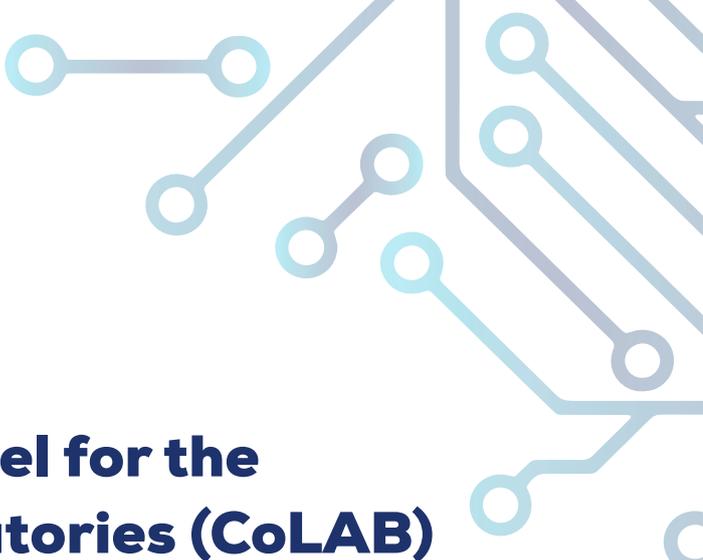
@ olga.moreira@iniav.pt

### AREAS OF EXPERTISE

Safety, quality and sustainability of feed and food production, competitiveness of the feed sector, competitiveness of the livestock sector; Environmental sustainability.

### AFFILIATES

- National Institute of Agricultural and Veterinary Research, I.P., (INIAV)
- Portuguese Association of Animal Feed Manufacturers (IACA)
- University of Trás-os-Montes and Alto Douro
- Abel Salazar Institute of Biomedical Sciences of the University of Porto (ICBAS-UP)
- University of Évora
- INESC TEC - Institute for Systems and Computer Engineering, Technology and Science
- Sorgal - Sociedade de Óleos e Rações S.A.
- RAPORAL S.A.
- Finança Agro Alimentar SA.
- TECNIPEC - Serviços Pecuários, S.A.
- TNA - Tecnologia e Nutrição Animal S.A
- RICO GADO NUTRIÇÃO S.A.
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# Evaluation Panel for the Collaborative Laboratories (CoLAB) Recognition Process

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# COLAB

Laboratórios Colaborativos

