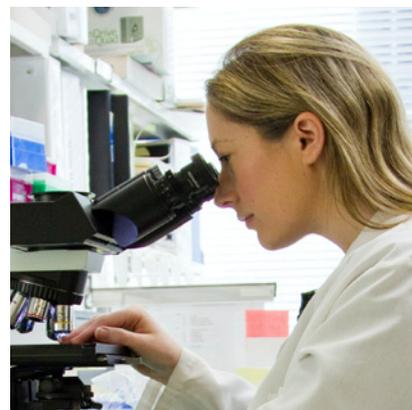
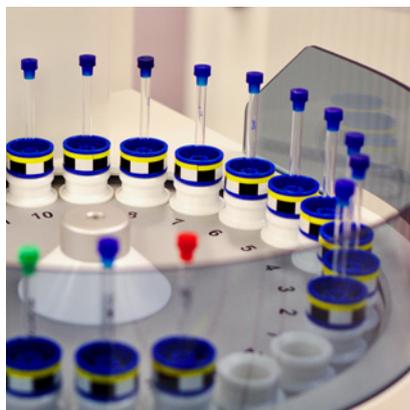


BIO-HEALTH 2030 STRATEGY



ENSURING HEALTH IN THE FUTURE IMPLIES INVESTING IN LIFE SCIENCES AND BIOTECHNOLOGY TODAY

Executive Summary

The SARS-Cov-2 pandemic changed the way we view the role of Science and Knowledge in Society. In fact, the pandemic has shown that scientific knowledge in Life Sciences is not only central, but it is the key to an adequate response to this type of Health crisis. It is essential to support decision-making in public health and epidemiology, as the pathogen identification and the diagnosis of infected patients can only be done through Biotechnology. Without knowing what we face, we are unable to make appropriate decisions. Without Biotechnology, it would be overly complex, if not impossible, to identify the virus. The fields that are absolutely crucial to fight or constrain pandemics like this one are all related to Life Sciences: virology, immunology, physiology, molecular biology or genetics.

We are facing a public health crisis, but public health measures only allow us to survive, they do not allow us to overcome the crisis. **We need Biotechnology:**

- 1 To diagnose infected patients:** laboratory tests through PCR- Biotechnology Technique.
- 2 To compile epidemiologic data:** serological tests- Biotechnology Products.
- 3 To develop a vaccine –** Biotechnology Products.

Hence, **we will only come out of this crisis using the different areas of Life Sciences, either in diagnosis, drug development or prevention.** This clearly demonstrates the need to have a strong investment in this sector in order to have a resilient society, able to respond to emergencies of this nature.

On the other hand, we are witnessing a blockage of the distribution chains, which emphasizes the geo-strategic need to increase production capacity to supply the Health vertical. In fact, advances in the Health sector can only become new solutions, products or services through a strong cluster in Life Sciences. A robust and dynamic Industry is needed to provide the Society with a quick and effective response to crises like the SARS-Cov-2. In particular, **we need innovative companies, capable of developing new solutions in an agile way. An effective technology transfer structure to bridge the gap between research and the economic sector is also needed to foster innovation and capacitate the industry stakeholders.** And a specialized investment structure is essential to adequately fund these developments.

There is no doubt that it is this capacity that allowed, and is still allowing, to develop new methods of diagnosis, patient screening, new treatments, advanced therapies, and vaccines for COVID-19. Countries with strong Biotechnology clusters are leading this process. Examples like Germany, Denmark, or the United States, will come out of this health crisis stronger than before.

It is, therefore, clearly demonstrated that economic competitiveness and social stability of a country is intricately linked to a sustained investment in Life Sciences and a productive capacity to supply this sector. The Health sector as a whole represents 9% of the Portuguese GDP and is responsible for approximately 1.5 billion euros of high added value product exports per year. The Health sector pays 20% above the national average and the Life Sciences sector itself pays 54% above average and at least 80% of its employees have at least one higher degree. This economic base, together with the availability of highly qualified human resources, strongly increases our growth potential.



Proposal

Create a thematic operational program Portugal Bio-Health 2030 (with immediate reprogramming of the PT2020), with Biotechnology and Life Sciences being considered priorities in the National Smart Specialization Strategy, and with the application of national public funds to strategically and consistently invest in this area for the next decade. This investment must be sustained and transversal, from basic and translational research, to innovation and industrial capacity, allowing to **position Portugal as a Research and Development center – Portugal as an R&D Hub in Biotechnology and Life Sciences** – and as a **strategic pillar for the production capacity in the EU – Portugal as the European Factory for Health** – reinforcing EU's autonomy and resilience to disruptions in global distribution chains.

Portugal: a hub of R&D



Basic Research

- Program contracts (VIB Model)
- Adequate funding instruments
- Independence from political and governmental cycles



Technology Transfer & Applied Research

- Specialized Venture Capital
- Supra national TTO
- Service providers' network
- Translacional Research



DeepTech Companies

- R&D profile
- Competitive advantages and Intellectual Property
- Investment needs
- Complex technological development

Portugal: Europe's Factory

- High added value products and margins
- Qualified Human Resources
- Promotion of an SME Business European Enhancement Act



Production, manufacturing and industrial capacity



Medical devices



Basic components



Drugs

Among the set of measures, we can highlight those covered by **Portugal Bio-Health 2030:**

- **Empowerment of the EU's industrial base through the creation of an SME Business European Enhancement Act**, which defines that 10% of EU Member States' spending should go to EU SMEs and that another 10% should go to EU equity owned companies, to guarantee EU industrial capacity (inspired by a US equivalent), as the basis for an EU industrial policy.
- **Constitution of a strategic reservoir to ensure EU's productive capacity in Health**, as a way of increasing the autonomy of European production chains.
- **Promotion of highly qualified employment**, particularly at the doctorate level in which Life Sciences is one of the sectors of excellence, with salaries 54% higher than average.
- **Promotion of technology transfer through the reinforcement of Venture Capital Funds specialized in Life Sciences** to finance biotech, medtech and digital health startups, by creating a new fund of funds at IFD, following the model of BPI France.
- **Creation of the SME-DEEPTeCH Company concept**, following the model of BPI-France.
- **Promotion of Clinical R&D in Portugal** as an engine of new funding formats for the Portuguese National Health System, following the model of Belgium or the Netherlands.
- **Attraction of Health R&D hubs to Portugal**, in order to create a cluster of high added value products and services.

The objective is simple: **we want to level the trade balance in this sector**, by increasing translational and clinical research and productive capacity in Portugal. **We want a robust economic cluster capable of serving the country, Europe and society.** This is because we believe that only a strong Biotechnology sector can make the country resilient to this type of crisis and that this cluster can be a robust social and economic development engine, based on a long-term sustainable technological competitive differentiation.

PROPOSAL COORDINATION

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P-BIO - Portugal's Biotechnology Industry Organization brings together companies linked to the Biotechnology and Life Sciences sector in Portugal. Since it was founded in 1999, it has been the cornerstone for development and support of Biotechnology in Portugal. P-BIO seeks to develop an environment that is favourable to the creation and growth of start-ups, promoting their corporate development, nationally and internationally. As a member of EuropaBio, the Organization is key to linking companies and their relevant partners in government, investors, regulating agencies and other institutions linked to the industry.

MORE INFORMATION

www.p-bio.org/en/estrategia-p-bio