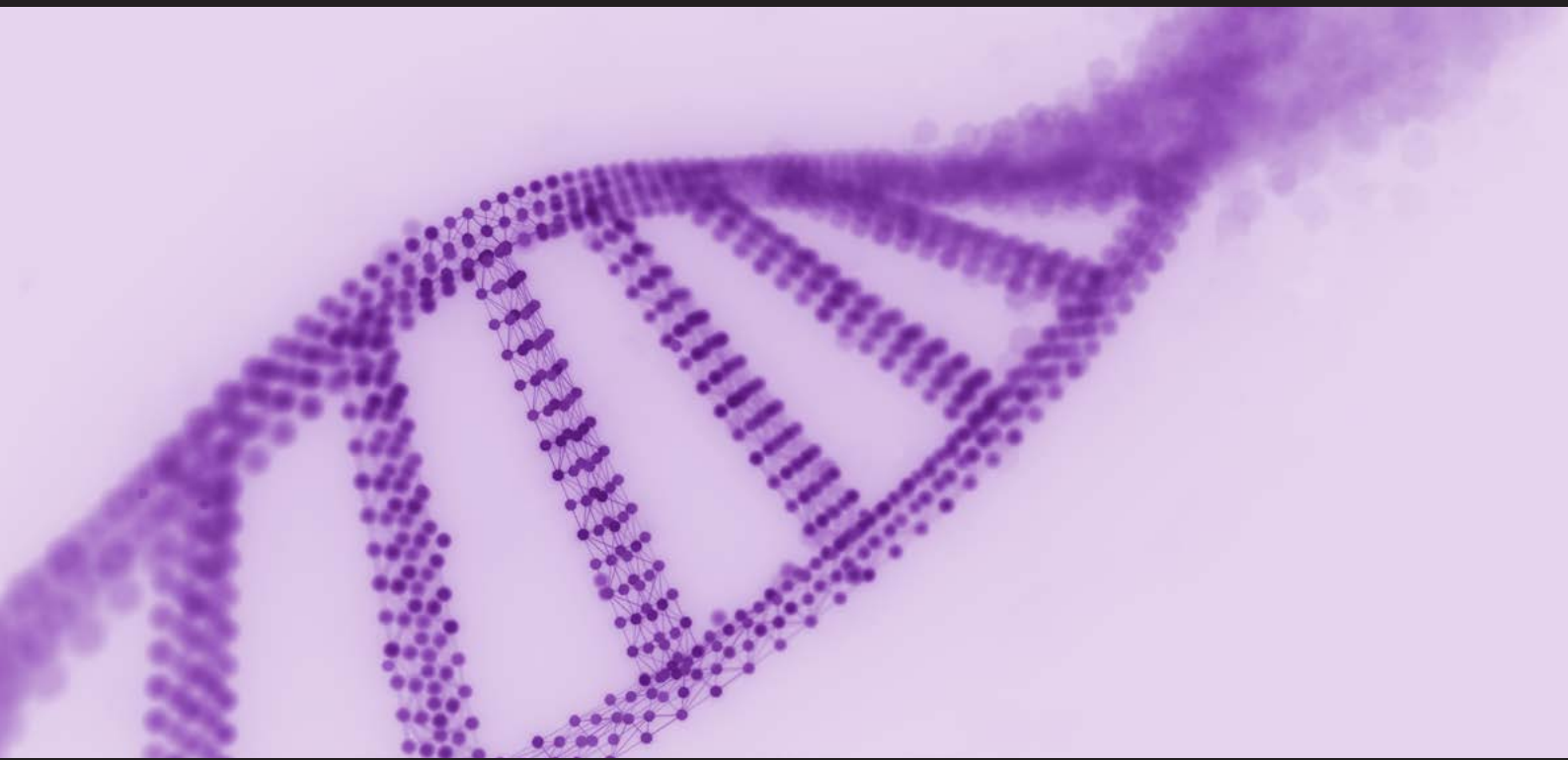
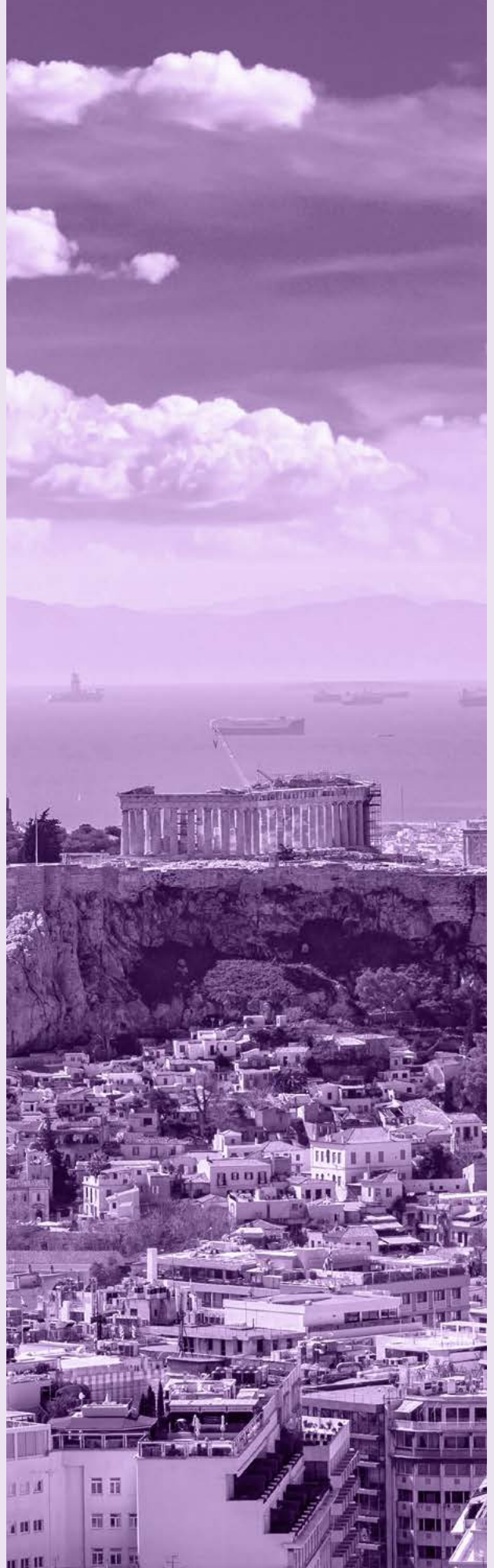


2025

SHAPING THE GREEK BIOTECH SECTOR OF TOMORROW

Insights from the Roundtable on The Future of the Biotechnology Industry in Greece





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Introduction

The biotechnology and life sciences sector in Greece has been characterized by substantial growth over the past few years, transforming itself into a key driver of transformation for the Greek economy. The numbers speak for themselves - with Greece's pharmaceutical market projected to reach \$9.8 billion by 2027, from \$7.8 billion in 2023, this showcases a predicted growth of more than 8%¹. To this end, the sector is increasingly associated, by stakeholders with strategic importance, with the overall growth of the Greek economy. This growth is fueled by cutting-edge academic research, increased governmental and institutional support, and rapid innovation from both startups and established companies in the biotech and life sciences space.

Today, Greece holds a prominent position in the European pharmaceutical and life sciences industry, accounting for approximately 10% of Europe's total production network, with 45 factories in operation. This presence is expected to expand further over the next two years, bolstered by significant investments. According to Theodoros Tryfon, President of the Panhellenic Pharmaceutical Industry Association and co-CEO of ELPEN Group, the Greek pharmaceutical industry is directing €1.5 billion toward upgrading infrastructure and constructing 10 state-of-the-art factories and 14 new research centers by 2026. This investment is anticipated to create over 5,500 highly skilled jobs².

Global pharmaceutical leaders are increasingly recognizing the potential of Greece as a viable and competitive investment destination. In 2021, Pfizer announced a €650M predicted contribution to the economy of Thessaloniki, through the company's Digital Innovation and Business Operations and Services Centres launched in the same year, aiming to employ more than 700 people³. The initial investment by Pfizer was at €100M⁴. By 2022, Pfizer's Center for Digital Innovation (CDI) was running more than 200 top-tier tech-enabled projects, with multiple of these projects enabling pharmaceutical R&D and product development.⁵ Pfizer is not the only global player investing in Greece's life sciences sector. In 2024, Boehringer Ingelheim announced additional investment of €120M to expand its manufacturing plant in Koropi, an investment strongly tied to current and future innovation plans of the company⁶.

In addition to infrastructure and investment, Greek talent is being recognized on the global stage. Established leaders in the tech space are becoming increasingly aware of Greece's expansive pool of scientific and engineering talent. According to Sequoia Capital, Athens is a top global hub for AI talent⁷, with AI becoming an integral part in the life sciences and biotechnology industries. At the same time, Insead's Global Talent Competitiveness Index 2023, ranked Greece in 39th place in the world (≈top 20%). Furthermore, according to EY's newest research on Greek talent departments with an emphasis on STEM make up 30.7% of all departments in Greek universities, a percentage that is on par with European standards.⁸ At the same time, earlier in 2024, Greece announced a strategy and legal framework around the introduction of a "Talent Visa" and a "Tech Visa", intended to attract third-country graduates to live and work in Greece, following in the footsteps of other European countries in the pursuit of best practices around talent.

At the same time, Greece's new era as an emerging global hub for biotech innovation is driven by significant investments and strategic projects. The Athens LifeTech Park, an ELPEN initiative, is the country's first biotechnology park and serves as a cornerstone of this development. It aims to create a strong, vibrant ecosystem for health and life sciences, facilitating collaboration between academia, startups, venture capital, and established industry to expedite drug discovery and development, through its incubator, research center, CRO and business facilities. The Athena Research Center and the Archimedes Center for Innovation and Entrepreneurship further contribute to this dynamic landscape, fostering cutting-edge research and innovation, promoting the role of Greece in the global biotech landscape.

Challenges remain despite these advancements. Fragmented efforts, inconsistent funding, and the absence of a unified strategic vision, alongside lack of long-term scope, act as blockers for the realization of Greece's full potential in the biotech sector. To address these issues, stakeholders must leverage the strengths of the Greek economy and biotech sector, address systemic gaps, and foster a culture of collaboration and innovation.

This report presents the key takeaways from the roundtables on The Future of the Biotechnology Industry in Greece, co-organized by BioInnovation Greece and Endeavor Greece. Here, we outline actionable steps to propel Greece to the forefront of the global biotech sector by building a thriving and competitive ecosystem that drives innovation, creates opportunities, and contributes to economic growth.

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Establishing a Unified Vision

The Challenge

Greece overall lacks focus and emphasis on its strategic strengths, that can be used as beacons of progress. This lack of focus is also present in the biotechnology sector, where there is an absence of prioritization for areas of improvement.

The Solution

A thriving biotech ecosystem requires a shared, long-term vision among stakeholders. Drawing lessons from successful global examples, such as Belgium's VIB, USA's RTI, Israel through its focus areas of cybersecurity, health and tech, or other strong ecosystems like the UK and Germany, it becomes clear that Greece must define clear priorities that align with its unique strengths.



The need for fostering collaboration among different stakeholder groups was identified as fundamental in the co-creation and commitment to this shared vision.

Core Strategic Actions

Focus on Strategic Areas

Identify and prioritize sectors where Greece is perceived as having an inherent advantage. Examples that came up during the discussion include regenerative agriculture, bioeconomy, and wellness. By aligning the country's focus areas with trends identified globally, Greece can build momentum in high-impact areas like translational science—a proven driver in ecosystems such as Belgium through VIB's work. Furthermore, strategic strengths can also be found in areas like marine biotechnology and agritech, which align with Greece's geography and heritage. Investing in these sectors can set Greece apart on the global stage.

Adopt a Long-Term Perspective

One of the points highlighted early on in the discussion was the necessity of a long term focus, something which is significantly absent in the Greek biotechnology ecosystem. Need was expressed by multiple stakeholders for the development of a foresight program for long-term planning that allows for consistent, sustainable growth of the ecosystem, thus insulating it from short-term disruptors, such as change of political leadership. Stakeholders must recognize that impactful ecosystems take decades to build and require continuity and commitment. Once again VIB was brought as an example, which started as a decade long plan, which then developed into a twenty year plan.

Engage Stakeholders

The need for fostering collaboration among different stakeholder groups such as academia, government, sector, and the diaspora was identified as fundamental in the co-creation and commitment to this shared vision. A unified strategy both as to the scope and duration of the above can help align efforts across sectors. At the same time, it is important for the different stakeholders and clusters to come together as the majority of these organizations have been created on a similar vision, with a lot to be gained from inter-organizational collaboration.



Fostering Connectivity and Collaboration

The Challenge

One of the recurring themes from the roundtable was the fragmentation of efforts across academia, sector, and government.

The Solution

The stakeholders of the biotechnology sector in Greece need to break down silos and foster a culture of collaboration, founded upon a shared vision for the future of Greek biotechnology.



Human capital and scientific exchange is essential to the successful creation of a biotechnology hub in Greece.

Core Strategic Actions

Create a Translational Science Hub

One point expressed both from stakeholders of the academia as well as the investment space, was the need to build an inter-university research center that bridges basic science with translational research. It was highlighted that this bridge between the aforementioned points has been proven to be one of the driving levers of growing ecosystems around the world. In order to create a growing and sustainable biotechnology hub in Greece, the emphasis on translational science should be accompanied by commercialization pathways to transform research into viable biotech companies with potential for commercialization.

Encourage Public-Private Partnerships

During the discussion, it was noted that there is a clear fragmentation between the public and private sectors in the country. It was recommended that incentives should be put in place to encourage local and international companies to invest in Greek-based initiatives relevant to the biotechnology sector from financing PhDs to setting up R&D centers and more. Examples like Pfizer's operations in Thessaloniki highlight the impact that such initiatives can have on local economies and innovation ecosystems.

Strengthen Regional and International Ties

With increasing globalization, countries and innovation ecosystems around the world are more interconnected than ever before. This is true for Greece as well, both on a European and Southeastern European level, while also encompassing the country's ties with its diaspora in notable biotechnology hubs around the world, such as Boston, Silicon Valley, RTI, UK, Singapore, etc. As a starting point, Greece can be positioned as a biotech hub for Southeastern Europe by forming alliances with neighboring ecosystems and fostering cross-border collaborations. At the same time, networking with established hubs, such as the Cambridge Innovation Centre in Boston can accelerate Greece's global positioning, while also exposing key stakeholders to best practices. Furthermore, this type of exposure can facilitate human capital and scientific exchange. During the discussion, the consensus amongst participants was that human capital and scientific exchange is essential to the successful creation of a biotechnology hub in Greece. The Hellenic Institute of Advanced Studies (HIAS) was highlighted as an example through its work to connect high achieving Greek academics of the diaspora with Greece. This objective aligns closely with BioInnovation Greece's core mission to harness the expertise of the Greek biotech diaspora and integrate it into the country's growing innovation ecosystem.



Addressing Funding Gaps

The Challenge

A critical barrier to growth in the biotech sector is the lack of consistent and targeted funding, particularly for proof-of-concept and early-stage ventures. At the same time there is a lack of education for researchers to understand the value of funding and how it can help them fuel their growth.

The Solution

Create a consistent and scalable funding mechanism to bridge the gap between research and commercialization, ensuring that early-stage biotech ventures have the resources to develop and validate their innovations. This approach fosters long-term growth at an early stage.



It is of the essence to engage Greek diaspora to provide mentorship, funding, and market access.

Core Strategic Actions

Establish or Attract Proof-of-Concept Funds

Create a dedicated fund evaluated by international experts to support promising biotech ideas with commercialization potential. This fund should prioritize translational research and projects with clear market applications, for lasting and scalable impact. This will help address issues of pursuing grants/program funding which may lead to a high drop rate of R&D and continuity following their completion.

Leverage Diaspora Expertise

It is of the essence to engage Greek diaspora to provide mentorship, funding, and market access. With multiple years of experience in and exposure to established, high-growth innovation ecosystems, the diaspora's role can be instrumental in connecting local innovation with global markets, as well as learnings and best practices.

Encourage Strategic Investments

Emphasize the attraction of venture capital and angel investors through incentives, such as favorable tax laws and co-investment schemes. Increasing funding consistency is essential to ensuring sustainable growth and development of the Greek biotechnology sector. At the same time, by advocating for steady and predictable funding mechanisms to support both academic research and startups, dependence on fragmented and inconsistent public funding is reduced.



Developing Talent and Entrepreneurial Culture

The Challenge

While Greece's talent pool, especially in STEM fields, is one of its greatest strengths, there is a need to cultivate a culture that values entrepreneurship, risk-taking, and innovation.

The Solution

We need to enhance education around research commercialization and entrepreneurship, while also establishing incentives to reduce and reverse brain drain. This will enable Greece to leverage the potential of its human capital and support the development of a global biotechnology hub. At the same time this should be accompanied by a culture of storytelling and extroversion to communicate the ecosystem's successes.



Promoting a culture of storytelling around Greece's biotech achievements to inspire trust and enthusiasm within the ecosystem, can lead to a significant push forward.

Core Strategic Actions

Enhance Entrepreneurial Education

Integrate commercialization and entrepreneurship training into academic curriculums for scientists and researchers. At this time, what is needed for a true cultural shift in academia is being able to visualize the possibility of commercialization. Leveraging existing innovations while developing skill sets for bridging research with market needs can foster the development of a sustainably growing biotechnology hub in Greece. During the discussion, it was highlighted that there are countless research projects that could have become promising business ventures with viable commercialization potential.

Building Entrepreneurial Ecosystems

Grassroots efforts, like the Bio3 BioInnovation Forum organized by BioInnovation Greece, institutionally-supported incubators like Eurobank's egg – enter grow go, and academic initiatives like the ACEin program of the Athens University of Economics and Business, are key components of Greece's growing biotech ecosystem. These initiatives foster entrepreneurship among early career bioscience researchers, provide access to mentorship and resources, and create a pathway for translating research into viable startups. Expanding and supporting such programs can help strengthen Greece's position as a biotech innovation hub.

Reverse Brain Drain

Strengthen initiatives to attract Greek professionals back to Greece by offering incentives and showcasing success stories. Tax incentives and high-visibility campaigns can help accelerate this process, attracting both good scientists as well as business executives with longtime commercial experience, as both are viewed as essential in supporting this change.

Celebrate Success

It has been argued that Greece has lacked extroversion and showcasing its successes. Promoting a culture of storytelling around Greece's biotech achievements to inspire trust and enthusiasm within the ecosystem, can lead to a significant push forward in making Greece an attractive biotechnology hub for regional and global players. At the same time, by highlighting role models, it can help foster an entrepreneurial mindset among young scientists. The use of compelling narratives can help attract international attention and investment, while creating and leveraging prominent case studies can further validate Greece's potential and inspire growth of the biotechnology sector.



Building Infrastructure and Ecosystems

The Challenge

The biotechnology ecosystem in Greece today is fragmented with stakeholders and organizations who are not collaborating, even though they aspire to a similar vision and common goal of transforming the sector and making it competitive on a global landscape.

The Solution

To sustain innovation, Greece needs robust infrastructure and interconnected ecosystem players, to move the needle and lead to long-term, meaningful change.



Tech transfer offices can act as a vital link between researchers and the [biotech] sector.

Core Strategic Actions

Develop a Single Biotech Cluster

Multiple biotech clusters and organizations exist in Greece today which are fragmented, while sharing a similar mission and vision to help the Greek biotechnology sector thrive. By establishing a dedicated biotech cluster with shared resources, especially in the form of real estate that includes lab space, technical equipment, and administrative services, will empower collaboration and synergies among stakeholders in a more efficient and effective way. This kind of cluster can streamline innovation, the formation and scaling of startups through access to the necessary resources. A representative example of this includes the Athens LifeTech Park. At the same time, academic/research institutions like Archimedes Research Unit are aiming to bring large pharmaceutical players closer to emerging technologies.

Create Testing Facilities

Invest in hospitals and labs where innovative solutions can be tested in real-world conditions. Without accessible testing environments, research remains theoretical and disconnected from market needs. Israel was raised as an ecosystem example that has done this effectively. In Israel, all startups are tested and gather real world evidence at the Sheba Medical Center, even at pre-revenue stage.

Establish Bridges to Global Hubs

Set up physical and operational connections to biotech hubs like Boston, Silicon Valley, UK and Israel to facilitate knowledge exchange and market access. This once again touches on the example of the Cambridge Innovation Center, where national innovation organizations from around the world have physical offices there and house innovative startups from their local ecosystems. Station F in Paris has also set up a similar model, which also includes large tech companies, investors, and other stakeholders. Proximity to leading institutions globally can enhance both credibility of national organizations from around the world and learning opportunities.

Strengthen Tech Transfer Offices

Tech transfer offices are essential for translating academic research into commercializable innovations. However, the current system lacks the resources/consistency to support this process effectively. By empowering these offices with knowledgeable professionals and funding, Greece can improve patent commercialization and ensure that research does not stop at publication stage, thus creating the right infrastructure for innovation. Tech transfer offices can act as a vital link between researchers and the sector. During the Endeavor Greece delegation at SLUSH in Helsinki we had the opportunity to learn more about Aalto University's Tech Transfer operations, one of the leading universities in innovation globally. Some efforts are being made in Greece at this time by research institutions, universities as well as ESETEK.



Ensuring Consistency and Continuity

The Challenge

Inconsistent support and policy changes have compromised trust in Greece's biotech sector.

The Solution

Stability and continuity are essential for long-term growth and achieving the long-term vision highlighted previously. At the same time, key performance indicators need to be established and tracked to know that there is progress in the right direction, or when pivots are necessary.



Stakeholders need to examine and understand the current state of the biotechnology sector in Greece, building and updating a comprehensive inventory of Greece's biotech capabilities and activities to inform decision-making.

Core Strategic Actions

Establish Initiatives Independent of Politics

It is essential to introduce initiatives independent of political affiliations as parties and political leadership changes over time, making initiatives that are affiliated with the political leadership at risk during times of change. To this end, efforts associated with the topic at hand can be characterized by extended longevity.

Institutionalize Ecosystem Mapping

In order to move forward, stakeholders need to examine and understand the current state of the biotechnology sector in Greece, building and updating a comprehensive inventory of Greece's biotech capabilities and activities to inform decision-making. This can prevent duplication of efforts and enhance strategic planning. At the same time, in order to track progress, associated markers should be identified that function as signals when milestones are achieved on the way to establishing a competitive biotech hub in Greece.

Promote Meritocracy

Implement transparent mechanisms for evaluating and funding projects to build trust across the ecosystem. These mechanisms should involve clear criteria, objective assessment processes, independent evaluators and accountability measures to ensure an equitable distribution of financing and resources across the ecosystem. Creating a culture of advancement based on merit can promote greater participation and investment, as well as stakeholder confidence.

Conclusion

Greece stands at a pivotal moment for its biotech sector. By adopting a strategic, collaborative, and long-term approach, the country can overcome existing obstacles and build a globally competitive biotech ecosystem. The journey outlined in this roadmap highlights actionable steps, from establishing a unified vision to leveraging Greece's unique strengths. Today, these steps are achievable, given the collective commitment of stakeholders across academia, sector, government, and the diaspora.

Looking forward, Greece has the potential to become a regional leader and a global player in biotechnology. Its rich talent pool, emerging infrastructure, and unique cultural and geographical assets provide a strong foundation for the achievement of this success. However, achieving this vision will require coordinated, collaborative efforts, sustained investment, and a willingness to embrace change and innovation.

BioInnovation Greece is uniquely positioned to drive this transformation, acting as a key facilitator in bridging academia, sector, and investment, fostering international collaborations, and providing critical support to early-stage biotech ventures.

The vision is for a Greek biotechnology ecosystem where cutting-edge research transitions seamlessly into world-class innovations and commercialization opportunities, where biotech startups thrive next to pharmaceutical conglomerates, and where the next generation of scientists and entrepreneurs are empowered to scale their innovations globally out of Greece. This future is possible with the support, investment and resources of all stakeholders of the biotech sector.

About **BiInnovation** Greece (BiG)

BiInnovation Greece (BiG) is a non-profit organization founded in 2024 by a team of seasoned professionals with deep expertise in biotechnology, healthcare and entrepreneurship. The team brings a diverse range of experience from leadership roles spanning research, startup development, scientific project management, legal strategy and consulting, with a strong presence in both the United States, the UK and Greece. United by a shared vision, BiG is dedicated to advancing Greece's biotech ecosystem through innovation, collaboration, and high-impact initiatives.

BiG was established as a dynamic think tank with the goal of driving the growth of Greece's biotechnology sector, fostering synergy between sector, academia, and investment. A core strength of BiG lies in its deep connections with the Greek diaspora, leveraging a global network of renowned academics, entrepreneurs and investors sectors, in deep-tech and particularly in Biotechnology. By serving as a bridge between Greece and its diaspora, BiG harnesses cutting-edge ideas, business initiatives, expertise, and investment to accelerate biotech innovation in the country. One of its flagship initiatives is the Bio3 Forum, an annual event launched in 2023 that brings together key stakeholders to shape the future of Greece's biotech landscape, promote groundbreaking research, and foster strategic partnerships.

About **Endeavor** Greece

Endeavor, the leading global community of, by, and for High-Impact Entrepreneurs with presence in 43 markets, has been active in Greece for the last 13 years. Its goal is to support the development of a dynamic and innovative Greek ecosystem that is full of opportunities. For Endeavor, overall prosperity thrives where there is strong support for promising entrepreneurs, thus, selecting and supporting innovative fast-growing businesses with the help of its expanded network of mentors and investors made up of hundreds of prominent personalities globally. Today, Endeavor Greece actively supports 146 successful Greek entrepreneurs who are members of the global network, and over 93 companies in Greece through various programs. To learn more about the organization and its initiatives, visit endeavor.org.gr.

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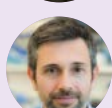
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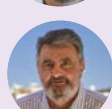
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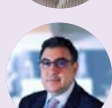
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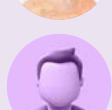
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