

Biomanufacturing Platform

Biomanufacturing Policy Summit Report 2024

**Policy pathways for biomanufacturing in Europe:
strengths, weaknesses, opportunities and threats**

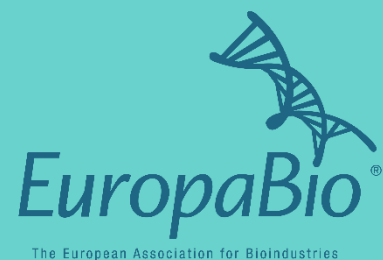


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Executive Summary

The Biomanufacturing Policy Summit is an annual meeting organised by EuropaBio that brings together biotech industry representatives and policymakers to discuss the most timely and relevant topics for biomanufacturing across sectors. The 2024 edition occurred in Brussels on 13th March and gathered 73 participants, including participants from the European Commission and the European Parliament.

“Policy pathways for biomanufacturing in Europe” was the Summit theme and the umbrella topic for discussions on the best ways to defragment and accelerate biomanufacturing in the EU, plus biomanufacturing policies from other global regions. It is a critical timing for biomanufacturing, as different policy files and discussions are underway at EU level, with an impact on relevant products or processes including biopharmaceuticals, new genomic techniques, detergents, alternative proteins and cell-cultivation.

This report summarizes the Summit’s main discussion points and takeaways and uses them as a foundation to build a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis for biomanufacturing in Europe. The analysis is further refined with data from recent reports and examples provided by EuropaBio's members, in order to add evidence and practical examples to support the arguments. Following the [2023 report which presented 10 recommendations](#) for biomanufacturing, the 2024 SWOT analysis aims to act as an open conclusion from the Summit, adding substance to the ongoing debate around biomanufacturing in Europe.

The fast-moving global biomanufacturing landscape and its cross-sectoral nature poses complex challenges to Europe, as it needs to foster its strengths and tackle its weaknesses, without leaving behind any critical sector for European economy and citizens. Furthermore, its dynamic and diverse set of perspectives may reveal changes in the short or medium-term and different priorities across sectors and Member States (MS).

Therefore, the report stresses the urgent need to address the question “What does the EU want to be?” and build an answer with pillars in innovation, skills, smart and agile legislation and financial instruments, and the Single Market. [The EU needs a smart industrial policy for biotech and biomanufacturing](#) rooted in science-based policymaking, which promotes and incentivises the scale-up of infrastructures and sustainable solutions and creates innovative and resilient supply-chains, whilst answering the EU’s long-term ambitions.

About the Biomanufacturing Platform

EuropaBio's Biomanufacturing Platform has the mission to represent biomanufacturing at the highest policy levels in Europe, build recognition and understanding in and around biomanufacturing and highlight its importance to Europe's competitiveness, resilience, sustainability and innovation.

EuropaBio champions biomanufacturing across its Healthcare, Industrial Biotechnology and National Associations Councils and as a cross-sectoral Platform brings these voices together to accelerate Europe's growth.

Main Platform Activities

- Biomanufacturing Policy Summit - The annual half day summit brings together stakeholders, such as industry representatives and policymakers, to discuss on the EU's ambitions for biomanufacturing and the tangible pathways to success across strategy, policy, regulation and legislation. [2023 - Report & Recommendations](#).
- Biomanufacturing Definition 101 - One of the first challenges of the Platform was to shape a baseline definition for biomanufacturing, understandable to wider stakeholders and society. Read the full [101 Definition](#).
- Biomanufacturing in Our Lives - A set of story-telling videos that showcase different biomanufacturing products that we use or have a positive impact in our everyday lives. The first examples are [Vitamin B2](#), [Algal Omega-3](#), [CAR T-cells](#), [Detergents](#), [Cheese](#).
- [Biomanufacturing Global Series](#) - A snapshot of biomanufacturing general statistics, main policy developments and data on targets and investments of key global players - USA, India, Japan and China - to contribute with evidence to the discussion and support the development of a strategic view for the EU.
- Biomanufacturing Library - A library of biomanufacturing policy, strategy and industry documents which is a living repository in constant growth and mutation. Visit the [Library](#) and if you or your organization has any relevant documents that might find common ground with it, please do not hesitate to get in touch.

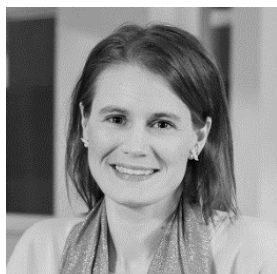
Keynote Speakers



The Human Element: Skills development for Biomanufacturing

Jan Beumer, Director People Experience, Pfizer Global Supply

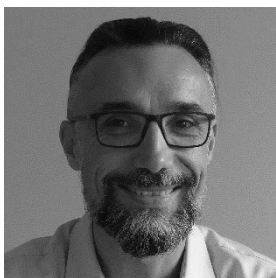
Pfizer is a global company with 36 manufacturing sites worldwide, providing medicines and vaccines to patients in over 180 countries and employing around 86,000 colleagues. The company's biomanufacturing site in Puurs is a key part of Pfizer's global manufacturing network; as well as a volume increase of over 60% in the last 10 years, the site is subject to an investment of over 1.2 billion euros between 2023 and 2025, and currently employs around 4,500 highly educated people. The Puurs site is focused on innovation and automation, with a strong R&D ecosystem and a disciplined approach to execution. The company is addressing challenges in attracting and retaining STEM talent through a range of external partnerships with schools, universities, and educational centres, as well as internal initiatives such as training and development programmes. One such programme is the ["Training is the new hiring" initiative, which aims to develop operators without technical backgrounds into higher job levels.](#) Pfizer Puurs is committed to co-creating a pathway to find, attract, and retain STEM talent, and is working towards becoming the most attractive, diverse, and inclusive employer in the industry.



Level up: New markets from Biomanufacturing

Freya Burton, Chief Sustainability Officer, LanzaTech

Carbon is the raw material of many final products that we use in our daily lives, but the key questions are: where does it come from, how is it processed and how is it disposed of? LanzaTech introduces a breakthrough biomanufacturing process that encompasses gasification, compression, clean up, fermentation, separation and storage, and [transforms industrial off-gas, agricultural or municipal waste or CO₂ from direct air capture into materials, fuels or proteins.](#) LanzaTech has over 1300 patents granted worldwide with over 575 pending. The use of different microbes for the same feedstock in the same reactor results in different products and potentially expands the product portfolio. However, LanzaTech highlights that without financial or policy support, great technologies do not get a chance to deploy, and that there is the need to "adopt a technology neutral position and support all solutions". It is time to rethink carbon, refining and harness biology to make everything we need.



Precision Fermentation: Yes, to planet-friendly Food Solutions
Sebastien Louvion, Chief Regulatory Office, Standing Ovation

The need to supply food to a growing world population whilst proceeding with the agri-food transition to help fight climate change, led to the emergence and expansion of a new field: alternative proteins biomanufacturing, which leverages biotechnology in the agri-food sector. [Startups and SMEs are key drivers of innovation](#) and Standing Ovation is such an example with its animal-free caseins. The process of precision fermentation uses microorganisms as cell factories to produce proteins of interest. The final product, the proteins, are separated and purified from the starting microorganisms in the manufacturing process. They have the same nutritional and functional qualities as the animal proteins, and Standing Ovation's caseins can be used in ice cream, yoghurt, cheese and other dairy applications. The benefits of the technology are two-fold: (1) offering an additional source of proteins to feed the world when the agri-food sector is already reaching maximum capacity whilst (2) also helping to decarbonise the industry and reduce the environmental footprint of protein production by 90% or more. The EU benefits from one of the best regulatory frameworks to ensure food safety, but it is also too slow and unpredictable with companies having to wait 2-3 years, sometimes more, before they can secure authorization to market – a huge disadvantage for EU competitiveness. Standing Ovation calls for a streamlined science-based approach.



The EU Belgian Presidency: Priorities for Life Sciences
Thomas Van Canghai, Advisor, Cabinet of Belgian Prime Minister

Belgium holds the Presidency of the Council of the EU in a critical moment for life sciences and Europe, with ongoing negotiations on key files such as the European Health Data Space and the EU Biotech and Biomanufacturing Initiative. In Belgium, the biotech sector conveyed two main priorities on biomanufacturing at EU level: [access to capital and access to market](#). The first focuses on the need for a Capital Markets Union and pull of private capital, by attracting Venture Capital or de-fragmenting the stock market to ensure the necessary depth and liquidity required to support tech scale ups, a kind of “European NASDAQ”, building on existing structures. The second, addresses the need to optimise and improve the market access across sectors through simplification and 'smart regulation' without compromising safety and quality standards. Lastly, it emphasizes the need to keep biotech and biomanufacturing in the upcoming political agenda, with the Council's Strategic Agenda and the Political Guidelines of the next European Commission.

Defragmenting & Accelerating Biomanufacturing - The Role of Policy

Panel: Jean Francois Bobier, BCG (Moderator) | Irene Sacristán-Sánchez, DG SANTE - European Commission | Sabrina Conti, Merck | Anna Handschuh, Gourmey | Jeroen Hofenk, SwiftPharma

The session brought together industry voices across different sectors and a European Commission biotechnology representative to address differences and commonalities on their challenges to defragment and accelerate biomanufacturing.

Opening Statement Highlights

- It is important to have a regulatory environment that works in a coherent manner and builds trust. Additionally, it needs to be harmonised with countries outside the EU.
- The proposal for plants developed using NGTs currently being discussed in the EU is as an example of legislation impacts biomanufacturing, and shows how a solid regulatory framework based on flexible risk assessment and monitoring could ensure safety while promoting market uptake of new products.
- There is significant interdependence across the biotech ecosystem between SMEs, large companies and academia.
- The entire value-chain must be considered in the policymaking process.
- From a healthcare perspective, challenges were identified on (1) high reliance on non-EU suppliers of active pharmaceutical ingredients (APIs) and raw materials, (2) the EU's lack of competitiveness compared to other geographies and (3) the changing global geopolitical landscape.
- We must recognise food biotechnology and biomanufacturing as a critical part of the solution for Europe's food security and sovereignty. Therefore, there is the need to resolve the regulatory challenges for novel foods in accessing the market, by aligning the single market as much as possible across MS and with the EU.
- Breakthrough biomanufacturing processes, namely in the health sector, hold the ability to enable flexible manufacturing which can be customised to answer to different needs. Nevertheless, new solutions face challenges such as regulatory uncertainty, sector mainstream actors inertia in innovation uptake and public understanding, due to knowledge deficit.

Discussion Main Takeaways

Awareness, Information & Understanding - There is the need to inform society on the applications of biotech impacting and improving everyday life, in order to raise awareness, build consumer trust, and promote market uptake of bio-based products.

Better Regulation - New challenges linked to novel technologies do not necessarily mean the need for new legislation, they may need smarter legislative processes or be connected to mechanisms for streamlining implementation or enforcement of current legislation.

Coalitions & Dialogue - A strong dialogue between industry and Institutions, is necessary to protect science, be competitive, and maintain and advance innovation for business and citizens in the EU.

Out of the Box - A Global View on Biomanufacturing Policies

Panel: Ion Arocena, AseBio (Moderator) | Virginie Le Coent, bioMérieux | Saskia Kliphuis, Corbion | Peter Steen Mortensen, Novonosis

The session provided first-hand insights on global policies from companies with biomanufacturing facilities in other geographies, in order to derive challenges and opportunities to Europe across health and industrial biotech.

Opening Statement Highlights

- The fragmentation of global legislation has an impact in the healthcare sector, namely through world pharmacopeias¹. Its lack of harmonisation across countries (e.g., EU, US, China) increases burden, reducing scale and speed which impact patient access. The importance of international collaboration was emphasized to modernise and harmonise regulation.
- An attractive ecosystem to retain and grow biomanufacturing in the EU is influenced by multiple factors, including policies and beyond. Decisions within fermentation manufacturing were guided by cost and availability of feedstock, energy prices, emissions frameworks and national tax regimes, in addition to the presence of existing manufacturing and proximity to customers.
- The EU must consider what is happening globally during its policymaking process. It must take into consideration the fact that businesses focus activities and further invest in geographies in which they are more commercially successful - the importance of the link between investment and return.
- There is a necessity to regulate suited to the science in question, rather than try to fit biotechnology into frameworks designed for chemicals.

Discussion Main Takeaways

Access & Availability of Feedstock - Europe would benefit from greater access to sustainable and cost-effective feedstock as it would enable the scaling-up of biomanufacturing and reduce final product costs, addressing a major market threshold for biomanufacturing.

Shape the Regulatory Landscape - The EU has an opportunity to lead the global regulatory pathway, either through improvement of current frameworks or the creation of new and smarter platforms to support and de-risk biomanufacturing.

Access to Market - The EU needs to improve its policy and regulatory processes in order to accelerate the access of new products to the market and therefore, be able to compete with other geographical regions.

¹ Pharmacopeias are the regulations that describe the methods for pharma quality control and cover, for instance, biopharmaceuticals, cell & gene therapies and small molecules.

How does Policy deliver for Biomanufacturing - Looking Ahead

Panel: Claire Skentelbery, EuropaBio (Moderator) | Sinead Keogh, Ibec | Wojciech Nowak, Novartis | Ana Maria Bravo, IFF | Christophe Lanneau, Genopole

The session wrapped-up the afternoon of discussions, summarised the Summit main messages and set a long-term vision for biomanufacturing in Europe, from a corporate and national association perspective.

“What does the EU want to be?”

The answer to this question frames the main ask from the Summit, as it provides a strategic destination for biomanufacturing and therefore adds predictability and consistency to the pathway. Many factors are considered when building the answer.

- **Regulation as an enabler**, fit-for-purpose and future-proof in line with innovation and new biotechnologies, supported by tools such as regulatory sandboxes.
- Legislation should consider the biomanufacturing **infrastructure** in place and address the current accessibility of **feedstock** in Europe, EU as a whole, and its distribution across MS.
- **Market uptake** support of innovation and new biotechnologies, by consumers and patients, as they answer to the needs of citizens.
- An **EU Single Market boost** leveraged by legislative consistency across MS to derisk biomanufacturing of sustainable products.
- **Skills** are a competitive advantage to Europe, but scaling-up the investment on high-quality talent generation is need, namely through reskilling and upskilling.
- An **industrial policy perspective for biotech and biomanufacturing**, to ensure a high-level strategy for the EU that is built on European strengths and improves its competitiveness.

Based on the remarks from the panel above, what can we say about **what does the EU want to be?** A region that encourages and rewards innovation for biomanufacturing through to competitive market access and citizen uptake. A region that has the resources, infrastructure and skills base to ensure that innovation and investment can flow for impact at scale. A region with a globally attractive market for biomanufacturing of advanced and sustainable products. A region that has a strong plan for how this will be achieved across sectors and MS.



“The second Biomanufacturing Policy Summit demonstrates European progress when looking at the critical importance of biomanufacturing. There is a greater awareness and focus on what we need to achieve and the legislative environment that will enable Europe to succeed.”

Biomanufacturing in Europe: Strengths, Weaknesses, Opportunities and Threats

This SWOT analysis is based on Summit discussions and recommendations by participants, reinforced with EuropaBio members inputs and external data. It reflects the EU's current position globally for biomanufacturing across sectors and compared to other regions. The analysis also highlights the factors behind each section and addresses how the EU could develop the optimum strategy to act on the SWOT as a whole.



Strengths - what Europe is doing well or better positioned than other players

High-quality R&D and Innovation - Europe is home of 42% of the world's top 100 universities for life sciences, according to [Times Higher Education's World University Rankings 2022](#). Additionally, it scores more strongly than US and China in high-quality publications covering health, agriculture and industrial biotech, according to [CWTS Leiden Ranking 2022](#). This is translated into the business arena, with startups and SMEs building breakthrough innovations. Examples during the Summit included [Standing Ovation](#) and [Gourmey](#) in the food sector and [SwiftPharma](#) in the health sector.

Skills Development - Europe benefits from a comparatively large pool of talent, with focus on collaboration and skills development through well-established and strong EU-wide research programmes. Talent generation relevant to biomanufacturing includes biotechnology, biomedical, biological engineering, plus broader engineering disciplines. The EU skills are a competitive advantage over other geographical regions, and have been able to deliver exceptional results, for instance in terms of R&D, as shown by the [CWTS Leiden Ranking 2022](#).

Current Infrastructure and Capacity - Europe has [21.7 million litres](#) of capacity, approximately twice the US biomanufacturing capacity, according to a report from [BCG and Synonym](#) from February 2024. The fact is also supported by a report from the [Good Food Institute](#) in 2023, which states that 47% of global protein fermentation capacity is in Europe. Therefore, based on the data available, it is possible to state that Europe is currently well positioned in terms of infrastructure and capacity.

Broad Strategic Drivers - The EU is anchored on a strong set of policies that steer and guide its overall direction. The existence of robust broad strategies such as the Green Deal, the General Pharmaceutical Legislation, the European Industrial Strategy and the Bioeconomy Strategy, are essential to lay the foundations for more specific strategies and to set high-level goals and targets.

Weaknesses - what Europe is doing badly or worse positioned than other players

Lack of Industrial Strategy for Biotechnology - The latest European strategy focusing exclusively on biotechnology dates from 2002 and the broader Bioeconomy Strategy updated in 2018, addresses biotech as a small part of the bigger picture. Regardless of the recently published communication ["Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU"](#), which addresses this weakness, the EU lacks an industrial strategy for biotech and biomanufacturing compared to other global regions.

Feedstock Access & Availability - Biomanufacturing relies heavily in bio-based feedstock² within industrial biotechnology as the raw material to apply biotechnology at an industrial scale. Therefore, the ability to scale-up depends on the stable availability and price of feedstock. The EU's industry faces a major cost and access barrier, demonstrated by company decision making towards biomanufacturing investment outside the EU within fermentation. From a health sector perspective, Europe also depends significantly on externally produced ingredients such as Active Pharmaceutical Ingredients (APIs), and other raw materials within medicines manufacturing, which creates a direct risk to supply and innovation.

² Such as agricultural crops and residues, animal residues, forestry crops and residues.

Funding Availability & Risk - For companies of all sizes to mature biotech and biomanufacturing innovation and outputs, they must attract or commit long-term investment, as highlighted for healthcare in the 2024 [Charles Rivers Associates report](#). Additionally, their cutting-edge nature increases the risk of failure or encountering unexpected barriers. Startups and SMEs struggle to find adequate financial instruments in the EU to match the sector needs, such as scaling-up production, or policy incentives to create trust in the market and investors for long-term developments. Other global regions often have more mature investment markets, creating a competitive advantage for the maturation of innovation.

Complex & Slow Market Access –The complex regulatory and legislative frameworks at EU, Member State and even regional levels, create headwinds for companies within biomanufacturing, compared to other global regions. This is a particular challenge for startups and SMEs, which have limited resources and cannot afford a lengthy risk assessment process.

Fragmented Single Market - The EU's market has its main strength on the Single Market and on its ability to leverage the 448 million inhabitants across 27 Member States. However, the complexity and lack of alignment between EU and Member State legislation for market delivery place challenges for biotech and biomanufacturing companies to harness the full potential of the EU Single Market and consequently, to create benefits for businesses and consumers. The fragmentation also weakens the ability to compete with other global regions or emerging competitors.

Opportunities - actions to reinforce strengths or tackle weaknesses

Boost Tech Transfer - Europe needs to foster its R&D and Innovation by creating effective channels to accelerate and improve technology transfer into biomanufacturing. The ability to scale innovation is critical to build impactful solutions in answering economic, societal and environmental challenges. Additionally, tech transfer and subsequent biomanufacturing will significantly benefit from full integration of data sharing, process digitalisation and the use of AI.

Enhance Access to Capital - The ability to provide tailored financial instruments at the necessary scale would address the funding challenges and unleash the potential of Europe's R&D. During the Summit, stakeholders suggested that the solutions could take form of the Capital Markets Union or a pull of private investment such as with incentives for Venture Capitals or the creation of a Nasdaq for biotech, as mentioned in the keynote speech from the [Belgian Presidency of the Council of the EU](#).

Lead the Global Regulatory Landscape - A global shift is taking place across sectors, towards the integration of biotech and biomanufacturing. This in turn is changing the regulatory landscape. The EU should seize the moment and welcome it as an opportunity to shape the regulatory landscape globally through pioneering science-based and agile legislation that supports innovation and the new industrial paradigm of sustainable products powered by biotech.

Infrastructure Transition & Construction - In addition to the current strong biomanufacturing capacity, Europe has an exceptional potential to use existing infrastructures and facilities from energy-intensive or other mainstream industries within biomanufacturing - an example showcased during the Summit was [LanzaTech](#) flagship plant in Belgium developed in partnership with the steel industry. Europe's leading position in biomanufacturing capacity can be reinforced through the construction of new pilot

and commercial plants to answer to the growing demand across sectors, such as food, chemicals or health.

Further Strengthen STEM Education - Europe's leading position on skills development needs to be protected and reinforced through structured investment on the broad Science, Technology, Engineering and Mathematics (STEM) skills. The plan should address the reskilling and upskilling of the current workforce, as well as the engagement with younger generations to showcase the importance these skills to the future of the industry, as highlighted by [Pfizer](#). This opportunity considers the growing demand for biomanufacturing skills and therefore, the need to strengthen Europe's position, rather allowing it to become a weakness, due to shortages or increasing global competitiveness for workforce.

Threats - potential weaknesses or consequences of internal or external trends

Science-based vs Political-momentum - Biotechnology within the EU has often been subject to politically-driven decision making, unconnected to scientific evidence, proportionality, safety or industrial significance. The outcome is that major industrial transitions have been led by other global regions in the past, and risks occurring again in the future. This critically undermines the EU's targets for sustainable, resilient and competitive progress. A coordinated and structured alignment between the EU and MS has an essential role to play in order to ensure that emerging biotechnologies may grow competitively within the EU, building on the substantial public investment into the research behind their development.

Supply-chain Security & Resilience - The current growing global protectionism marked by recent tariff disputes and geopolitical instability with Russia's war on Ukraine, may pose challenges to the EU's health, manufacturing and food sectors, due to its reliance on external inputs. Biomanufacturing is part of the answer, using regionally produced bio-based inputs, instead of imported energy sources or intermediates, and manufacturing products that would usually be imported or available from a limited number of suppliers.

Public Understanding and Uptake - Society and biotech have a long history in common dating back from the first biotech products: bread, wine, cheese and beer. Additionally, later, with the invention of vaccines and its unmeasurable benefits to human health. European citizens have long had a sensitive relationship with biotechnology despite widespread use, with flashpoints on key technology types or applications, reinforced through hesitance across stakeholders to be public champions. It is vital that public understanding is developed on the applications and development of biotechnology, with public champions across all stakeholders, including policy makers and industry.

Competitive & Fast Moving Global Regions - A global race to mature biomanufacturing is ongoing, with key countries positioning themselves through investments and targets. The EU's competitiveness profile in terms of regulatory pathways for R&D, financial instruments, market access, scaling-up production and building or transitioning infrastructures is key. The overarching goal in the global race should be to ensure that biotech innovations originating in the EU have the opportunity to grow into biomanufacturing in the EU, at a competitive pace and across the different sectors.

Biomanufacturing Champions & Success Stories

“Rethinking carbon, biomanufacturing to save the planet” from LanzaTech

LanzaTech is reshaping the way we think about raw materials. Gone are the days when we relied solely on the traditional linear approach of using carbon just once, often sourced from fossil fuels. Now, there's a greener choice. In partnership with steel maker, ArcelorMittal, LanzaTech technology has been deployed at the “Steelanol” facility in Belgium where the concept of waste gets a new meaning. There, carbon emissions from steel production are transformed into ethanol, through LanzaTech’s biomanufacturing process of fermentation. By harnessing the power of biocatalysts, 80 million liters of ethanol can be produced annually and used in various end products from fuels, apparel, cosmetics, and household goods, while reducing the emissions of the steel mill by 125,000 tonnes annually. This technology helps energy-intensive industries and consumer brands create value from waste.

LanzaTech



“Resilient biomanufacturing platform, for times of peace and crisis” from SwiftPharma

The ability to produce at an industrial scale is key to deliver impactful solutions for economic, societal and environmental challenges. Nevertheless, in times of rapid and unpredictable change, it is critical to build agile solutions that are capable to be adapted and shifted towards the short-term needs with effective and reliable results. SwiftPharma created an innovative platform to produce a wide range of proteins using *Nicotiana benthamiana* plant. The bioplatfrom is modular, enabling the production of different proteins in parallel; linearly scalable, growing with the number of plants in place; and fast, producing a target protein in one month, scaling in three months, transferring to good manufacturing practice in another three months and commercial scale is ready to start. This approach to biomanufacturing is essential to answer to current and potential threats to human health.



 **SwiftPharma.**

“A cutting-edge product and a market revolution, all with biomanufacturing” from Gourmey

A transformation is underway in the agri-food sector, driven by the urgent need to meet booming global protein demand amidst rising concerns around food security, and human and planetary health. Cell cultivation is part of the answer to transitioning the current food systems, as it is able to biomanufacture high-quality animal proteins through a novel and sustainable process to supplement current methods. Gourmey has set the challenge high with its first product, by biomanufacturing a new option for foie gras lovers with cultivated proteins. Foie gras is one of the most exclusive and complex foods. With its flagship innovation, Gourmey showcases the potential of cell cultivation to create culinary-grade experiences. Gourmey's delicacy harnesses carefully selected cells from duck eggs combined with plant-based ingredients to please the most discerning chefs with distinct roasted top notes, buttery and caramel-like heart notes, and a long-lasting base of intense meatiness. By marrying innovation and heritage, shows how biomanufacturing can add a complementary and delicious protein source to future cuisines.

GOURMEY



“Training the present and preparing the future of biomanufacturing” from Pfizer

People and skills are central to fuelling the industry of the future. Technological developments can only be designed, operated and improved by skilled professionals. For its manufacturing plant in Belgium, Pfizer Global Supply Puurs has been developing a comprehensive skills strategy to ensure that its workforce is well equipped for both today's and tomorrow's challenges. The strategy focuses on in-house training in STEM skills, including to help reskill colleagues; it also seeks to help address gender imbalances in the STEM field. Finally, it focuses on future generations by developing partnerships with local schools and other establishments to educate children and young people on STEM skills and industry. Educate today to prepare for tomorrow.



Summit Participant Organisations

Abolis
AseBio - Spanish Bioindustry Association
BASF
BCG
BIA – UK BioIndustry Association
BioDeutschland
bioMérieux
Cabinet of Belgian Prime Minister
Circular Bio-Based Europe Joint Undertaking
Corbion
Council of European bioRegions
CSL Behring
DG AGRI - European Commission
DG GROW - European Commission
DG RTD - European Commission
DG SANTE - European Commission
dsm-firmenich
EIT Health
EuropaBio
European Bioplastics
European Biosolutions Coalition
European Parliament
Evonik Operations GmbH
France Biotech
Genopole
Good Food Institute Europe
Gourmey
HERA - European Commission
Ibec
IFF
Innovation Insights Sarl
LanzaTech
Merck
Novartis
Novonosis
Pfizer
Standing Ovation
SwiftPharma

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