

GFI's GLOBAL HIGHLIGHTS

August 2024

The top highlights:

- **The Indian government announced its new national biotechnology policy, [BioE3](#) (Biotechnology for Economy, Environment, and Employment), which includes alternative proteins as a key focus area.** GFI India is an integral part of the Science Ministry's sectorial committee on smart proteins whose meetings and proposals led to this outcome. Read more on this proposal and GFI India's involvement [here](#).
- **The world's foremost journal of biotechnology, *Nature Biotechnology*, did a deep dive into the science of cultivated meat and concluded that the technology has great potential.** The journal released [its official position on cultivated meat](#), stating that governments should invest in the technology as a strong science-based intervention for climate, biodiversity, food security, and more. GFI science and policy team members engaged with the article's editor and connected the author to key cultivated meat scientists.
- **GFI APAC and GFIC (an independent strategic partner that does mission-aligned work in mainland China) worked with Singapore's Agency for Science, Technology and Research, and the China-based Suzhou Research Institute to organize a China-Singapore [scientific symposium](#).** The event focused on regulatory harmonization, manufacturing scale-up, and talent development programs as top priorities in both countries, showcasing a shared commitment to advancing alternative proteins as a critical part of both countries' bioeconomies.
- **GFI's SciTech team has been working hard on the National Science Foundation's [CASA-Bio project](#) focused on advancing the U.S. bioeconomy.** SciTech team members are co-chairing two of the six workshops: Food Protein Diversification and Circular Bioeconomy. This month, they brought together scientists and industry leaders across multiple days to discuss key R&D needs and cross-cutting themes related to each topic area. Chairs are working over the course of this month to write a report to the White House Office of Science and Technology Policy.
- **The World Food Prize Foundation, focused on using science to solve global hunger, announced plant-based Lead Scientist Priera Panescu, Ph.D., as one of 38 awardees of their inaugural [Top Agri-food Pioneers awards](#).** We're very proud of our colleague and delighted that the prize committee understands that alternative proteins can help to decrease hunger and malnutrition around the globe.
- **GFI's university program, the [Alt Protein Project](#) (APP), welcomed 21 new groups, bringing the total number of APP chapters at top science and engineering schools around the world to 70.** The APP is a rigorous program with a tough application process, a six-week training course, required reporting, and more. Check out our [welcome blog](#), and hear from APP participants directly in [this video](#) welcoming the new chapters.



How we're contributing to our core objectives

The following objectives capture GFI's approach to accelerating the development of alternative proteins and transforming the global food system. Below is a sampling of last month's work.

GFI fosters a strong open-access alternative protein research and training ecosystem

- *The Journal of Biological Engineering* published a [review](#) co-authored by Lead Scientist Claire Bomkamp, Ph.D., that provides a comprehensive look at cultivated seafood and a roadmap for the science and technology required to advance the field.
- GFI Brazil co-hosted a side event at the [1st Brazilian Congress of Industrial Biotechnology](#), at which more than 1,000 attendees focused on the connections between environmental sustainability and biotechnology. GFI Brazil's side event had three panels discussing the potential of fermentation and cultivated meat technologies, with panelists representing startups and academic research. The third panel included Dr. Mark Post, who discussed the current technological challenges for cultivated meat industrial production and advice for young scientists.
- GFI Israel's SciTech team led a gathering of over 60 stakeholders from academia and industry at the Technion - Israel Institute of Technology to explore novel R&D opportunities in alternative protein science. The event featured a presentation by GFI Israel on current R&D priorities and collaborative research ventures, insights into cutting-edge science from leading researchers and start-ups, and roundtable discussions on academia-industry collaborations, biomimicry, nutrition, and consumer perceptions.
- GFI Israel SciTech Manager Anton Slavkin delivered a presentation and mentored students at the final event of the joint FoodTech Nation and Technion - Israel Institute of Technology program. This 30-hour student program was led by industry experts, investors, and government officials and offered an in-depth introduction to the challenges facing the foodtech industry. During the event, students proposed innovative approaches and solutions to a [challenge](#) from GFI's solutions database.
- The Federal University of São Paulo's plant-based meat nutritional [study](#), conducted with the support of GFI Brazil, was featured prominently on the university's [main news page](#). This publication underscores the university's commitment to disseminating and recognizing high-quality scientific research, contributing to the advancement of knowledge and the international visibility of Brazilian academic production. Supplementing this study, GFI Brazil published a technical brief on the nutritional aspects of plant-based meat in the Brazilian market in [Portuguese](#), [Spanish](#), and [English](#). The brief examines the nutritional quality of plant-based products from the perspective of their nutritional labels and the classification of these foods based on NOVA, LOUPE, and Nutri-Score indicators.
- Scientific Partnerships Manager Bianca Datta, Ph.D., moderated August's Science of Alt Protein [webinar](#) featuring Dr. Vayu Hill-Maini, Assistant Professor at Stanford University. Dr. Hill-Maini



presented his work bridging approaches from gastronomy, synthetic biology, and systems biology to unlock the potential of filamentous fungi for sustainable and delicious foods.

- GFIC hosted 15 university students at their annual three-day alternative proteins science immersion in Wuxi, China. Activities included laboratory visits, sensory analysis, and a debate competition. Read GFIC's [blog post](#) to learn more about the students' experience.
- Principal Scientist Elliot Swartz, Ph.D., hosted this month's Cultivated Meat Collaborative webinar featuring a presentation from Hydrosome Labs. Their team shared the capabilities of ultrafine bubble technology in fermentation and cell growth processes that can address bottlenecks in the alternative protein industry.
- GFI APAC SciTech Engagement Specialist Arin Naidu and GFI APAC SciTech Specialist Maanasa Ravikumar, Ph.D., co-hosted the first APAC edition of GFI's Cultivated Meat Collaborative webinars. Dr. Alex Ward, founder of Arta Bioanalytics, shared insights into his company's pioneering work in leveraging multiomics and bioinformatics for process optimization in cultivated meat R&D pipelines. Dr. Yuki Hanyu, founder and CEO of IntegriCulture, shared his company's efforts to provide solutions to enable entities of all sizes to embrace cellular agriculture.
- GFI APAC collaborated with SGInnovate to co-host a cultivated meat researcher networking event. The event brought together 25 researchers and scientists from adjacent fields, including pharmaceuticals, microbiology, and material science.

GFI influences the public sector to support alternative proteins

- GFI Europe's engagement with UK Research and Innovation (UKRI), a national public body that directs research and innovation funding, has helped elevate alternative proteins as a priority area for funding. The UK government [made a £15 million investment](#) into a National Alternative Proteins Innovation Center (NAPIC), led by the University of Leeds. Building on the government investment, NAPIC has already begun building significant private sector support and has ambitious plans to link research and innovation activities across the United Kingdom. This funding pushes the United Kingdom to over £90 million of public funding for alternative protein R&D.
- Brazilian Congressman Jorge Goetten introduced Bill 3357/2024 to regulate the research, production, and marketing of cultivated foods, as well as incentivize research and commercial development in this sector. It is the first bill within the Brazilian National Congress to support cultivated meat and was the direct result of much work from the GFI Brazil policy team with Representative Goetten's office over the last few months.
- GFI APAC Acting Policy Manager Samuel Goh [presented](#) on the growth of Asia's alternative proteins sector at the Asia Sustainability Dialogue, organized by Asia Society Switzerland and the Swiss Re Institute. The event attracted an audience of nearly 300 participants, both online and in-person, representing diverse fields such as academia, banking, insurance, government, NGOs, and media, along with members of the Asia Society network. The dialogue aims to inspire responsible action, foster sustainable development, and enhance cooperation between Europe and Asia in these critical areas.

GFI influences the private sector to prioritize alternative proteins

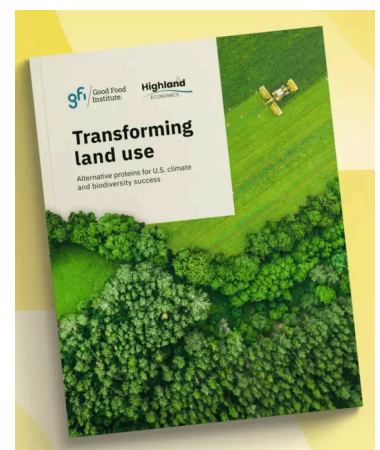
- Senior Manager of Investor Engagement and Financing Sharyn Murray and Senior Corporate Engagement Manager Laine Clark published [Funding the Build](#), a guide reviewing the financing

landscape facing alternative protein companies as they scale from pilot to commercial manufacturing. With contributions from industry leaders and capital providers, the report explores capital pools beyond venture capital to help companies navigate the evolving funding environment.

- Senior Scientific Research Advisor Erin Rees Clayton, Ph.D., and Sharyn were panelists on Protein Production Technology and Gingko's [webinar](#) to talk about financing options for funding fermentation R&D in today's investing climate, including traditional funding avenues and emerging alternatives like crowdfunding and impact investing.
- The GFIdeas India August [webinar](#) brought together industry experts to discuss critical steps and strategies for successfully turning India into an alternative proteins export hub, which would help drive down costs globally and boost the Indian economy. Topics included trade rules, market entry strategies, strategic partnerships, and scaling operations across multiple regions.
- Corporate Engagement Coordinator Kimberly Taylor and Associate Director of Industry Intelligence and Initiatives Emma Ignaszewski coordinated the August Business of Alt Protein [webinar](#) focused on how insights from plant-based meat sensory studies can help improve the taste of plant-based meats. Caroline Cotto, director of NECTAR, an initiative of Food System Innovations, shared key takeaways from NECTAR's inaugural publication [Taste of the Industry 2024](#), a large-scale sensory analysis of plant-based meats.
- Laine served as chair for the Industrializing Cultivated Meat & Seafood Summit, providing opening and closing remarks for the event. She also led a presentation on achieving shared goals in the industry and moderated a panel on the promises and challenges of commercially viable cultivated meat and seafood.

GFI positions alternative proteins as a scalable solution to global challenges

- GFI India Policy Manager Arghadeep Saha was a panelist at the International Conference of Agricultural Economists to discuss alternative proteins and the Global South. The flagship event of the International Association of Agricultural Economists brought together over 1,000 economists and food system researchers from around the globe. Arghadeep's panel discussion addressed how the Global South can leverage indigenous crops to address malnutrition and the urgent need for action by national governments and think tanks to develop case studies on interventions that can work in the context of low- and middle-income countries.
- GFI India's [revamped website](#) went live this month. New pages include the India-specific [research repository](#) and dedicated sections for science, industry, and policy.
- GFI's SciTech team, in collaboration with Highland Economics, released a [first-of-its-kind analysis](#) spotlighting the potential climate and biodiversity benefits of alternative proteins land use efficiency in the United States. Prier led a [webinar](#) to share key findings, and, with support from GFI, the World Business Council of Sustainable Development featured an [article](#) about the analysis on their website.
- GFI Brazil published the [Sustainability of Alternative Proteins fact sheet](#), which focuses on critical areas such as environmental performance, climate change, food security, health, production and consumption, natural resources, and the economics of both alternative and conventional proteins.



Top media mentions:

- PRX's *The World*, a popular news podcast broadcast on hundreds of NPR stations, quoted Senior Scientist Faraz Harsini, Ph.D., in a [piece](#) about cultivated seafood: "According to WHO's former director, it's going to be the end of modern medicine when we have [an] antibiotic-resistant pandemic ... Again, that's a problem completely mitigated with cultivated meat."
- Xinhua Finance, the national financial information platform of the largest news organization in China, published an [article](#) on the China International Conference for Blue Finance Innovation and highlighted GFIC Director of Strategic Partnerships Grace Liu's speech on the benefits of alternative seafood.
- Elliot was quoted in an [article](#) in *Ha'aretz*, one of Israel's most influential newspapers. The article discusses a [new study](#) published in *Nature Foods* by Professor Yaakov Nahmias from the Hebrew University of Jerusalem. The study introduces an efficient method for producing cultivated meat, which could significantly reduce production costs and bring prices closer to those of conventional meat.
- Senior VP of Policy and Government Relations Jessica Almy, J.D., was quoted in a *Vox* [article](#) about government support for plant-based proteins. "Early stage R&D is more of a focus for this sector in particular because the products are so early in their development, and we think they can be so much better than they are."
- Director of Regulatory Affairs Laura Braden, J.D., was quoted in a *Wired* [article](#) regarding litigation challenging the Florida cultivated meat ban: "Consumers should decide what kind of meat they want to buy and feed their families—not politicians. This lawsuit seeks to protect these consumer rights, along with the rights of companies to compete in a fair and open marketplace."

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From everyone on [Team GFI](#), thank you for your enthusiasm, partnership, and commitment to a better future.

Sincerely,



Bruce Friedrich
President and Founder

