

GFI's GLOBAL HIGHLIGHTS

October 2023

The top highlights:

- **GFI's international teams released two new, in-depth reviews of alternative proteins: GFI India's first-ever [State of the Industry Report in India](#)** captures developments across science, policy, industry, and the commercial landscape over the last five years. The team hosted a launch event for the report that included networking with industry stakeholders and tastings from leading plant-based brands. **GFI APAC's inaugural [State of the Industry Report for Asia Pacific](#)** spans public and private investments, the R&D ecosystem, product development, and key market insights. The report was announced during a main stage panel at this year's Singapore International Agri-Food Week ([SIAW](#)), Asia's leading food innovation conference.
- **GFI Brazil worked with academic and industry partners to publish a Hazard Analysis and Critical Control Points (HACCP) food safety [study](#) for cultivated meat production.** The study will help lay the foundation for the new technology in Brazil and includes a detailed flowchart of the cultivated meat production process.
- **GFI Europe Senior Policy Manager Acacia Smith coordinated the final draft and executive summary of European Institute of Innovation and Technology (EIT) Food's Protein Diversification Think-Tank's policy brief [Accelerating Protein Diversification for Europe](#)**, which was launched at EIT Food's [flagship conference](#) and shared during a panel with the European Commission's agriculture and research directorates.
- **GFI APAC and the APAC Society for Cellular Agriculture launched the [APAC Regulatory Coordination Forum](#) at the Singapore Food Agency's Regulatory Roundtable held at SIAW.** A memorandum of understanding was signed to align participating organizations around the goal of coordinating regulatory frameworks for novel foods. Signatories from Australia, China, India, Indonesia, Israel, Japan, Malaysia, Singapore, and South Korea are now unified in their mission to streamline approval processes and reduce alternative protein trade barriers across the world's most populous region.
- **GFI published a robust [sidestream analysis](#)** that identifies commodity crop "waste" that can become inputs for alternative protein production, leading to lower costs and better environmental metrics. The report also provides recommendations to policymakers and food producers. Check out our [webinar](#) for the highlights.
- **[GFI's 2023 mid-year impact video](#) showcases a behind-the-scenes peek at GFI's impact from 10 of our 200+ team members around the world.** Watch to hear about our work empowering students to increase the inclusivity of the alternative protein talent pipeline, amplifying alternative proteins in the European Union's Protein Strategy, growing the GFIdeas APAC community, and so much more—all made possible by our global community of donors.



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

- At the [Global Agri-Food Scientific Symposium](#) portion of SIAW, which was organized in partnership with GFI APAC, Senior VP of Science & Technology Liz Specht, Ph.D., used her keynote address to debut a first-of-its-kind work-study initiative for plant-based meat production in Singapore. The initiative brings together key public and private institutions, including GFI APAC, Nanyang Technological University, the Singapore Institute of Technology, Singapore Polytechnic, Kerry, SGProtein, and Bühler, to develop a training program that will prepare participants for three main job roles within Singapore's plant-based food industry: protein texturization specialist, plant-based meat product specialist, and extrusion specialist.
- GFI Europe Senior SciTech Manager Seren Kell and GFI Europe Research Support Manager David Hunt collaborated with the [Biochemical Society](#), an international scientific network of over 7,000 biochemists, to host a [webinar](#) on alternative protein career pathways.
- GFI's science and technology experts released the latest installment of the triannual State of the Science [webinar series](#), covering developments in the scientific ecosystem from May through August of this year.
- GFI Brazil SciTech Analyst Mariana Demarco, Ph.D., lectured on the alternative protein sector to food technology and agronomy students at a top federal university in Brazil for the [National Week of Science and Technology](#), organized by Brazil's Ministry of Science, Technology and Innovation.
- GFI APAC SciTech Specialist Maanasa Ravikumar, Ph.D., presented on cultivated meat technical and commercial developments for staff at Kalbe Farma, the largest publicly listed pharmaceutical company in Southeast Asia.
- Lead Scientist Prier Panescu, Ph.D., participated in a panel alongside the head of sustainability at Cargill to discuss balancing conventional and alternative proteins in the future food landscape at [Food Ag Ideas Week](#).
- GFI launched the [Industry Partner Database](#), a centralized resource to foster connections between industry professionals and Alt Protein Project (GFI's university chapter program) students and educators at universities around the world.
- The John Hopkins Alt Protein Project (APP) team joined Academic Community Manager Nathan Ahlgrim, Ph.D., for this month's alternative protein educator community call, an ongoing forum for educators to share resources and best practices. The APP students presented on their journey to building and hosting a three-credit class at Johns Hopkins.
- Senior Scientist Lucas Eastham, M.Sc., took part in poster sessions for the Society of Industrial Microbiology and Biotechnology's Recent Advances in Fermentation Technology [conference](#), which convenes fermentation scientists across the pharmaceutical, industrial, and food sectors. He presented on two GFI analyses: fermentation manufacturing and crop sidestreams for alternative protein production.
- Associate Director of Scientific Ecosystems Amy Huang moderated the October Science of Alt Protein [seminar](#) featuring [Dr. Victor Ujor](#) of the University of Wisconsin-Madison. Dr. Ujor discussed

his research on sustainable carbon and nitrogen sources for the production of alternative proteins via fermentation.

- Principal Scientist Elliot Swartz, Ph.D., hosted this month's Cultivated Meat Collaborative [seminar](#) featuring presentations from [Tanda BioTech](#) and [Sudhin Biopharma](#) about advances in filtration technologies and inclined settling bioreactors that can be applied to the cultivated meat industry.
- GFI Brazil SciTech Manager Cristiana Ambiel was a guest speaker for the State University of Campinas (UNICAMP) Food Engineering Faculty's monthly [webinar](#), which focuses on developments in science, technology, food engineering, and nutrition. Cristiana discussed the regulatory and safety overview of cultivated meat and shared GFI Brazil's HACCP food safety study.
- GFI Brazil Scitech Analyst Isabela de Oliveira Pereira gave a lecture on fermentation technology for the symposium "Food and Drug Research Towards a Sustainable World," organized by the University of São Paulo, the largest and top-ranked Brazilian public university.
- SciTech Manager Yeshe Liang of GFIC, an independent strategic partner that does mission-aligned work in mainland China, shared a poster presentation on Enabling Cultivated Meat with Tissue Engineering Technologies at the [TERMIS-AP](#) (Tissue Engineering & Regenerative Medicine International Society - Asia Pacific) Conference in Hong Kong.
- In collaboration with John Ellersick and Reina Ashizawa from Next Rung Technology, Elliot co-authored a chapter on cultivated meat techno-economics in the newly published textbook [Advances in Cultured Meat Technology](#), which covers every aspect of cultivated meat.

GFI influences the public sector to support alternative proteins

- GFI Israel CEO Nir Goldstein delivered an [online presentation](#) at [The Future of Food Conference](#), organized by EIT Food. As part of a plenary session on innovative approaches to sustainability and resilience, Nir discussed methodologies for building foodtech ecosystems and the importance of alternative proteins to food security.
- Founder & President Bruce Friedrich joined GFI VP of Policy for Asia Sam Lawrence in Japan to meet with key governmental figures and private-sector stakeholders. The visit culminated in an invite-only, plant-based dinner organized in conjunction with the Collier FAIRR Initiative. The event was attended by two Members of Parliament responsible for parliamentary groups on foodtech and cellular agriculture, as well as representatives from the Japanese Bioindustry Association, MUFG (Japan's largest bank), the University of Tokyo, Japan Association for Cellular Agriculture, and select investment firms, who collectively discussed further actions needed to advance alternative protein investment and regulatory progress. Recognizing the growing interest in alternative proteins in the region, GFI launched its first [Japanese-](#) and [Korean-language](#) State of Global Policy Report summaries.



- GFI APAC collaborated with the Agri-Biotech Knowledge Centre Ltd. to [launch](#) a new science-based and industry-focused educational platform called CLIFF—Communication Leadership in Future Foods. Through media training courses, message-mapping workshops, and proactive consumer engagement, CLIFF will help alternative protein industry stakeholders avoid predictable messaging pitfalls that could slow consumer uptake and delay regulatory approvals. GFI APAC Managing Director Mirte Gosker formally introduced the program during a workshop at the [Asia-Pacific Agri-Food Innovation Summit](#), the anchor event of SIAW.
- GFI published a pair of alternative seafood-focused white papers exploring [the climate](#) and [marine biodiversity](#) benefits of accelerating global alternative seafood production. These deep-dive reports make clear the essential role that alternative seafood can play in meeting growing seafood demands, reducing sector emissions, and protecting the ocean ecosystem while helping the United States become more self-reliant and close the trade gap.
- Acacia spoke at the Danish Permanent Representation to the European Union on a panel about regulation and bio-based products in the agri-food transition. Her co-panelists included a Member of the European Parliament and senior officials from the European Commission's Directorate-General for Health and Food Safety, the Europe office of the FDA, the Europe Food Safety Authority, the Danish Veterinary and Food Administration, and Europe's largest biotech group, EuropaBio.
- GFI Europe Senior Public Affairs Manager Ivo Rzegotta led a [presentation](#) on GFI's role in the cultivated meat sector during the three-day symposium "Zukunftsdiskurse," a project on cultivated meat funded by the Lower Saxony state government in Germany. The symposium brought together scientists, startups, and corporations to share their work in the German cultivated meat ecosystem and identify regulatory and research funding needs.
- Legislative Specialist Drake Jamali and the GFI Policy team worked with industry stakeholders to oppose [proposed legislation](#) in Wisconsin that would prohibit the sale of cultivated meat unless the product is labeled as containing "lab-grown animal cells."

GFI influences the for-profit sector to prioritize alternative proteins

- For the conclusion of GFI India's [Smart Protein Innovation Challenge](#), aimed at inspiring and empowering future leaders in the alternative protein sector, GFI India hosted their first-ever in-person [Demo Day](#). Top teams pitched their solutions to address white spaces across the plant-based, fermentation, and cultivated protein industries, with six winning teams awarded prize money from GFI India's challenge partner [Spectrum Impact](#). Entrepreneurs, investors, and academics participated in the event and GFI India will continue to facilitate follow-on opportunities for finalists with academic and accelerator partners.
- Startup Innovation Lead Audrey Spence moderated a panel at [Verge23](#), one of the leading climate



tech conferences. Amy Chen from Upside Foods, JJ Kass from Tindle, and Mark Warner from Liberation Labs spoke on the panel about changes in the alternative protein market and reasons for optimism and continued growth.

- GFI Brazil SciTech Specialist Grazielle Grossi Bovi Karatay and Isabela were panelists at the [Seafood Show Latin America](#), where they discussed cultivated and plant-based fish alongside senior executives from Brazilian foodtech and biotech companies.
- Investor Engagement Manager Sharyn Murray and Elliot spoke in a fireside chat on alternative proteins with a focus on cultivated meat. The chat was hosted by the Telsey Advisory Group—a consumer sector research, trading, banking, and consulting brokerage firm—for their institutional investor clients.
- Lead Scientist Adam Leman, Ph.D., spoke at the Food Insider Education Session at SupplySide West, a trade fair for the health and nutrition industry, sharing an overview of fermentation-derived protein products and technical innovations poised to increase the availability and tractability of fermentation biomanufacturing. He then joined a [panel discussion](#) on fermentation’s role in the future of food and beverage with co-panelists from FMCG Gurus, Perfect Day, EQUII, and the Better Meat Co.
- GFI Europe Senior Corporate Engagement Manager Charlotte Lucas and Ivo were panelists for food innovation-themed events at the [Anuga Fair](#) in Germany, one of the largest trade fairs for the international food and beverage industry. Charlotte spoke about developments and challenges in the alternative protein industry, and Ivo spoke about alternative protein policy and regulation.
- GFIC launched its first e-magazine to coincide with World Food Day. The [inaugural issue](#) focused on the development and progress of cultivated meat in 2023 and was shared with startups, corporations, and industry allies.
- Audrey hosted October’s Business of Alt Protein [seminar](#) on distribution, a critical but often overlooked aspect of expanding a company's retail and food service footprint. The seminar featured five distributor experts who shared how to most effectively work with distributors and why they are important for business success.
- Charlotte shared an overview of alternative proteins and global trends alongside Robert Jones, vice president of global public affairs at Mosa Meat and president of Cellular Agriculture Europe, on a webinar organized by [the Agricult](#) that aimed to educate Italian venture capitalists on the agri-food space.
- GFI Brazil SciTech Specialist Amanda Leitolis, Ph.D., Cristiana, and Grazielle spoke at UNICAMP’s Permanent Forum during World Food Week. They led a talk on healthy and sustainable food production systems and participated in a discussion alongside the director of regulatory and scientific affairs at the Brazilian Food Industry Association (ABIA) and other industry leaders.

GFI positions alternative proteins as a scalable solution to global challenges

- Bruce presented the barriers and opportunities of alternative proteins to transform the food system to over 50 attendees at the [Food and Land Use Coalition](#)’s third quarter meeting.

Top media mentions:

- Seren was interviewed for [an episode](#) on the 80,000 Hours podcast about major research priorities for alternative proteins. The podcast serves as a two-hour answer to the question, “Why is it so

hard to make meat cost and taste competitive using plant-based and cellular agriculture?” We can’t recommend this podcast more highly.

- *Exame*, one of the most prestigious economics magazines in Brazil, quoted Grazielle in [an article](#) highlighting a new protein concentrate from carioca beans that can be used as a high-quality ingredient in various types of food products. The ingredient was developed by the Brazilian Agricultural Research Corporation (Embrapa) as the result of a project funded by GFI’s Research Grant Program. Grazielle noted: “Initially, a new ingredient may be more expensive when compared to traditional ingredients, such as soy and peas, due to the small production volume. But scaling studies can make the product competitive, including with export opportunities.”
- GFI Europe Research and Grants Manager Stella Child, Ph.D., was quoted in [a piece](#) on precision fermentation published by Agence France-Presse, the third-largest press agency in the world. Excerpt: “Products from precision fermentation ‘produce a fraction of the emissions from livestock farming ... and use less water,’ notes Stella Child. ‘In the same way that governments have helped the development of renewable energies, they should help the fermentation sector to scale up’ to promote more sustainable food.”
- CEO Ilya Sheyman and Bruce were quoted in a *Chronicle of Philanthropy* [article](#) about GFI and the role of philanthropy in alternative proteins. Excerpt: “Proprietary research conducted by companies has limited benefit to the sector as a whole, says Sheyman... ‘The ability to have open-access science and open-access knowledge sharing, that’s what enables the whole field to succeed.’”

Thank you for fueling our mission!

GFI is powered by philanthropy; these accomplishments are only possible thanks to gifts and grants from our family of donors. If you or someone you know would like to learn more about supporting the work you read about in our Global Highlights, please contact philanthropy@gfi.org.

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

Sincerely,



Bruce Friedrich
President and Founder

