GFI's GLOBAL HIGHLIGHTS

March 2024

The top highlights:

- **GFI APAC launched a first-of-its-kind career map for plant-based meat development and manufacturing.** The interactive web feature, spearheaded by GFI APAC SciTech Engagement Specialist Arin Naidu, stems from months of discussions with researchers and industry stakeholders to determine the areas of greatest need in Singapore's plant-based meat sector. The website also includes job archetypes for specific positions within the city-state's workforce and details on work-training programs available to help upskill recent graduates and mid-career professionals.
- **GFI Brazil participated in two workshops designed to support innovation in the alternative protein market, organized by the Brazilian Agricultural Research Corporation (Embrapa) and the Brazilian Ministry of Agriculture and Livestock (MAPA).** The workshops gathered company representatives and researchers to discuss the development of a national database on plant-based products, with sessions focused on ingredients, ingredient suppliers, plant-based product formulation, and packaging. GFI Brazil contributed information on plant-based consumer perception and critical technological challenges of the sector, and the team will continue to support the next phases of the database project.
- **GFI celebrated the passage of a U.S. federal spending bill that increases funding for alternative protein research at the U.S. Department of Agriculture's Agricultural Research Service (ARS), as well as encouraging developments on the proposed state-level cultivated meat innovation bans.** Associate Legislative Director Penny Eastman worked closely with several members of Congress and dozens of companies across the country to support this federal funding, which benefits ARS research in Arkansas, Louisiana, North Carolina, Wyoming, and several other states. At the state level, although Florida's innovation ban is still awaiting the governor's signature, proposed bills in three states are unlikely to move forward and others are not set to be considered at this time. GFI team members from across disciplines along with our industry allies worked together to contribute to these important responses.
- **GFI Europe was an official knowledge partner of the Bioprocessing Summit Europe in Barcelona, an event that brings together hundreds of bioprocessing scientists from across Europe, for its first Alternative Protein Production track.** The inaugural sub-tracks on cultivated meat and precision fermentation highlighted synergies between alternative protein manufacturing technologies and the bioprocessing sector. GFI Europe Head of Science & Technology Seren Kell led a featured presentation on cultivated meat trends, challenges, and opportunities and chaired a session on upstream production in precision fermentation.
- **GFI published our 2023 Year in Review to recap the great progress we made in the past calendar year.** Please take a look and pass it along!

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

- GFI launched our 2024 Research Grant Program Request for Proposals (RFP). The RFP will provide funding for foundational, open-access research in priority areas our global SciTech team and science advisory board identified as pressing challenges facing the industry that can have the most impact in moving alternative proteins to price and taste parity. We are accepting applications from around the world through May 23rd, and you can watch this information session for more details. To discover insights into our active and previous research projects, explore our revamped Research Grant Program projects page.
- Two of GFI's cultivated meat experts led widely viewed webinars on the progress and challenges of scaling up the cultivated meat industry. Principal Scientist Elliot Swartz, Ph.D., reviewed the major cost drivers of cultivated meat production and solutions being implemented to overcome them, and Senior Scientist Faraz Harsini, Ph.D., shared key takeaways on bioprocessing and production capacity from a comprehensive survey of 30 cultivated meat companies and suppliers. Both presentations provide insight into current and future needs and considerations for the industry.
- GFI India Innovation Associate Poorvasha Kar and GFI India SciTech Associate Amrutha Girivasan, in partnership with Wadhwani Research Centre for Bioengineering (WRCB), the Indian Institute of Technology Bombay, and venture capital fund Ankur Capital, organized the first GFIdeas India scientific community-building event that included academics, R&D industry leaders, researchers, and students. The event featured an opening address from the CEO of WRCB, a session on investment trends in the deep tech sector, and a panel of experts who discussed translational research, talent building, and enablers for driving innovation and R&D in the smart protein sector.
- GFI Israel VP of Strategy and Policy Alla Voldman moderated an industry-academia networking event designed to cultivate partnerships for submissions to the Food and Nutrition Call for Proposals, backed by NIFA-BARD (a partnership that promotes collaboration between U.S. and Israel scientists) and the Israel Innovation Authority. GFI Israel facilitated roundtable discussions during the event to stimulate conversation and expedite the initiation of new research projects. The event attracted significant attention from stakeholders across both sectors.
- GFI Israel CEO Nir Goldstein presented insights on the potential for alternative proteins to address food security challenges at an event dedicated to food security at the Technion - Israel Institute of Technology. GFI Israel also led and participated in roundtable discussions, ensuring the inclusion of our key messaging on sustainable proteins.



- Senior VP of SciTech Liz Specht, Ph.D., spoke on a panel on alternative proteins and planetary health at the 2nd annual Terasaki Institute Summit with Miller Tran of Triton Algae Innovations, Josh Tetrick of Eat JUST, and Gabriel Levesque-Tremblay of Orbillion Bio. The summit provides a forum for knowledge-sharing on advances and applications of biotechnology, translation, innovation, and intellectual property.

- Senior Scientific Research Advisor Erin Rees Clayton, Ph.D., accepted an invitation to join the advisory board for the $10 million research project Soil to Society led by Washington State University and funded by the U.S. Department of Agriculture. The project includes researchers from crop and soil sciences, food science, and health and medicine with the goal of creating more nutritious, affordable, and accessible plant-based foods from wheat, quinoa, peas, lentils, and other whole grains. GFI grantee Girish Ganjyal is on the leadership team of the project.
- Academic Community Coordinator Asia Sheehab led the quarterly careers webinar on academic and industry career paths in the alternative protein field, which included a fireside chat with early-career professional Josh Filer. Josh shared his experience building a career in the alternative protein field through the power of networking.
- Associate Director of Scientific Ecosystems Amy Huang moderated the March Science of Alt Protein webinar featuring GFI grantee Dr. Lutz Grossmann of the University of Massachusetts Amherst. Dr. Grossman explained how hydrogen can be used as an energy source to produce protein-rich, single-cell proteins without the need for agricultural inputs.

GFI influences the public sector to support alternative proteins

- GFI launched new resource pages for Japanese- and Korean-language reports and digital content. Japan and Korea are hotbeds of food technology innovation—the latter opened its applications for cultivated meat regulatory approval last month—so both are countries to watch closely.
- GFI Brazil signed an official Cooperation Agreement with the State Secretariat of Economic Development of Mato Grasso, Brazil's largest state for agricultural production. The agreement promotes an ecosystem of research, development, and production of alternative proteins within the state and is a result of the team's extensive engagement with the state government and rural producers' associations. An extract of the agreement was published in the state's Official Gazette.
- GFI Europe Senior Policy Manager Alex Holst moderated a panel session on strategies for protein diversification, co-hosted by GFI Europe and the Flemish Agency of Agriculture & Fisheries, as part of the flagship EU food policy event, the Open Food Conference, organized by the Belgian Presidency of the EU Council. Panelists from the Flemish and Dutch governments, the European Commission, and EIT Food discussed how their respective governments and organizations are advancing alternative proteins and shared insights on coordinating within administrations.
- Director of Policy Curt Chaffin, J.D., and Liz presented policy recommendations to the National Security Commission on Emerging Biotechnology (NSCEB) that reflect the need to pursue domestic scale-up, commercialization, and applied research in biotechnology-enabled food production like alternative proteins. Director of Legislative Affairs Laura Braden, J.D., also participated in an in-person, closed-door listening session organized by NSCEB seeking input from industry stakeholders on their work to help streamline U.S. regulation of biotechnology products.
- GFI Europe shared the results of their commissioned surveys on attitudes towards plant-based foods and cultivated meat in Austria and Germany, carried out by the market research company YouGov. The results, which found that nearly two-thirds of people believe consumers should have the choice to eat cultivated meat once it has been approved, were disseminated to 400 policymakers and stakeholders in both countries.
- GFI APAC SciTech Manager Wasamon Nutakul, Ph.D., presented at a virtual event on food trends hosted by Thailand's National Bureau of Agricultural Commodity and Food Standards and the UK

Embassy in Bangkok. She shared the potential of fermentation applications in the new wave of plant-based products, speaking alongside representatives from the UK Department of Business and Trade, Thailand Future Food Association, and the Office of National Higher Education Science Research and Innovation Policy Council.

- GFI Europe Senior Policy Manager Seth Roberts spoke at the Green Horizons Summit in Vilnius on a panel on the regulatory landscape for cultivated meat in Europe with co-panelists from Cellular Agriculture Europe, EIT Food, and the Lithuanian Ministry of Economy and Innovation and Ministry of Agriculture. Seth also gave a presentation to the Ministry of Economy and Innovation on a forthcoming land use study commissioned by GFI and GFI's recommendations for developing Lithuania as an alternative protein champion.
- GFI APAC Policy Specialist Ankur Kumar Chaudhary spoke on a panel on protein innovations at the Canada in Asia conference, an event that drew in over 450 leaders from the private sector, government, and universities across Canada and the APAC region for sessions on agri-food and climate solutions. Ankur discussed plant-based protein manufacturing and processing and integration into APAC food systems.
- GFI Europe Senior Public Affairs Manager Ivo Rzegotta was a panelist alongside the EU Commission and industry representatives at an event in Brussels hosted by the state government of Lower Saxony's Ministry for Food and Agriculture and Ministry of Economic Affairs. The event centered on what can be done to improve the process of European novel food regulation.

GFI influences the private sector to prioritize alternative proteins

- GFI Brazil launched their Startup Manual Guide, a detailed resource guiding companies through every stage of development from conception to product launch, including a section on the integration between universities and industries and how to take research to market.
- GFI Israel co-hosted a webinar with the Israel-Europe R&D Directorate showcasing the European Innovation Council (EIC) Accelerator Program, which offers dilutive and non-dilutive funding opportunities plus extensive support from industry mentors. The webinar explored funding for alternative protein startups and included the Co-founder and CEO of the fermentation company Brevel to talk about their experience as an EIC Accelerator participant.
- GFI India Senior Innovation and Entrepreneurship Specialist Aiyanna Belliappa and GFI India SciTech Specialist Padma Ishwarya presented at Startup Mahakumbh in Delhi. The event brought together India's startup ecosystem, including investors, incubators and accelerators, and industry leaders from several sectors, and featured 10 pavilions showcasing sector-focused innovation and trends. Their presentation was part of the Climate Pavilion and covered industry opportunities and R&D whitespaces across alternative protein technologies.
- Startup Innovation Lead Audrey Spence, Corporate Engagement Lead Marika Azoff, and Research Analyst Ben Pierce represented GFI at Natural Products Expo West, the world's largest platform for emerging food brands that convened over 65,000 food industry members. Audrey moderated a panel on the state of alternative proteins with four experts from plant-based and precision fermentation companies. Ben spoke alongside representatives from Plant Based Foods Association and SPINS for a session on the state of plant-based foods, sharing topline insights from the latest retail and foodservice market and consumer data.

- GFI Europe Head of Industry Carlotte Lucas gave a presentation on the state of the alternative protein ecosystem to the EU Specialty Food Ingredients trade body, which consists of major ingredient companies like IFF, DSM-Firmenich, Cargill, Ingredion, and more.
- Audrey hosted the Future of Food Leaders: Networking and Tasting side event at the Future Food-Tech summit in San Francisco, in collaboration with SOSV, MISTA, and Accenture. Senior Corporate Engagement Manager Laine Clark shared opening remarks for the side event, which convened entrepreneurs, investors, and industry leaders. Audrey also presented with Ginkgo Bioworks at the summit's heavily attended opening breakfast session to talk about the benefits, challenges, and opportunities for partnerships to scale precision fermentation, and Laine hosted a summit roundtable on non-dilutive and non-traditional alternative protein funding sources.
- Carlotte spoke on a panel with the CEO of Wildtype at The Future of Sustainable Aquaculture event held by Barclays for portfolio managers of public equity investments. While most of the conference centered on aquaculture, Carlotte's panel was the sole session focused on alternative seafood.
- Audrey and Laine hosted the March Business of Alt Protein webinar, which featured five experts from GFI's mentor program to talk about the commercialization of alternative protein products. The panelists shared advice on avoiding common pitfalls, learnings from commercializing their first products, and the benefits that GFI's mentor program can offer new companies.

GFI positions alternative proteins as a scalable solution to global challenges



- Founder & President Bruce Friedrich spoke at the Villars Institute Summit in Switzerland, a nature and climate leaders summit convened by former World Economic Forum leaders. He joined a plenary panel on science and technology breakthroughs aimed at preserving biodiversity and lowering climate emissions.
- Director of Science & Technology Matt Hotze, Ph.D., presented at The Institute for Science & Policy webinar exploring innovations in cultivated meat and its positive environmental impacts. Matt and meat safety expert Jennifer Martin discussed a shift towards alternative proteins, scientific challenges, the regulatory landscape, public perceptions, and the potential effects on ranching communities.
- GFI Europe Research Support Manager David Hunt spoke about the three pillars of alternative proteins at a webinar hosted by Swiss Food and Nutrition Valley on scaling sustainable proteins to address environmental and health challenges and the growing demand for meat.
- GFI Consultancy, an independent strategic partner that does mission-aligned work in mainland China, published their annual Year in Review in two languages for the first time: Chinese and English. The report highlights the industry's resilient and persistent work in China, where the alternative protein landscape is developing steadily year over year.

Top media mentions:

- Lead Scientist Claire Bomkamp, Ph.D., was quoted in an article from *The Atlantic* about the various ways cultivated meat might show up on consumers' plates: "We don't have to make meat the same way that it's always come out of an animal … We can be a little bit more expansive in what our definition of meat is."

- Senior VP of Policy and Government Relations Jessica Almy, J.D., was quoted in a *Wired* piece and Legislative Director Pepin Tuma, J.D., was quoted in a piece for *The Week* that covered proposed legislation attempting to ban or limit the sale of cultivated meat. Excerpt from the latter: "The ban could 'treat cultivated meat differently than traditional meat without any actual basis in the science and any actual basis in health and safety regulations,' ... 'The question is: Should government be the one to come in and tell us what we can or can't eat?'"
- GFI APAC Managing Director Mirte Gosker was quoted in an article for the *Straits Times*, Singapore's top newspaper, discussing the roll-out of plant-based meat options in public hospitals: "By ramping up distribution of plant-based meat through hospitals, governments can empower local manufacturers to scale up their operations, drive down costs through economies of scale, and make healthier, more sustainable foods more affordable for all consumers."
- Liz appeared on two episodes (EP:5 and EP:6) of *Barbecue Earth*, a six-part podcast series from Carnegie Endowment for International Peace, to talk about alternative proteins and their impact on global challenges. Excerpt: "One example that we're all feeling globally right now is the current kind of global grain shortage and price spikes that are resulting from a number of different factors ... droughts and lower crop yields due to climatic events, a number of things ... A third of global grain is currently fed to animals. That continued reliance on animal agriculture makes it that much harder for us to have global resiliency."
- Mirte was featured in an article by Deal Street Asia, a Singapore-based financial news website, about Singapore's alternative protein investment landscape: "When talking about cultivated meat and other novel ingredients, it's vital that alternative protein investors provide companies with patient capital that can sustain their R&D over the long term. It's far better for alternative protein startups to take their time and develop truly exceptional products—even if this requires conducting years of open-access research—than to rush the process, release sub-par foods into the market and irreparably harm the sector's reputation with consumers."

Thank you for fueling our mission!

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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