

## GFI's GLOBAL HIGHLIGHTS

March 2023

### The top highlights:

- **After months of work from GFI and our partners showcasing the opportunities and challenges facing alternative proteins, the White House Office of Science and Technology Policy (OSTP) released a report entitled [Bold Goals for U.S. Biotechnology and Biomanufacturing](#) which paves the way for substantial future public support for the alternative protein sector across the U.S. Federal Government.** The report combines extensive goals and recommendations from five executive agencies to create a broad vision for the American bioeconomy. Both the U.S. Department of Agriculture (USDA) and the Department of Energy identified alternative proteins as a key theme of the future of biotechnology and made recommendations to support alternative protein research and development, commercialization, scale-up, and public-private partnerships. GFI convened a stakeholder listening session with industry and academic leaders in December, which was attended by key members of OSTP and USDA, and we were thrilled to see multiple recommendations from GFI and other alternative protein stakeholders prominently included. The next step under the Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy will be a report from the White House OSTP in mid-June laying out plans to implement these recommendations.
- **GFI Israel is collaborating with the Israeli Prime Minister's Office to craft a revamped Alternative Proteins National Policy Plan.** Throughout March, the team discussed the needs of the Israeli alternative proteins ecosystem with several of the highest-ranking officials in Israel: the Minister of Economy and Industry, the CEO and the Chief Scientist of the Ministry of Science Technology and Innovation, and nine ministers at the Ministerial Committee on Science and Technology. Each of these policymakers showed great interest in further promoting the field.
- **GFIC, our independent strategic partner in China, produced [their 2022 year in review](#).** As CEO Doris Lee writes, "2022 was a watershed moment for both the alternative protein industry and GFIC." Check out how much they accomplished this year, with ecosystem testimonials offering a nice snapshot of their impact and insights from GFIC experts!
- **GFI Brazil hosted a lunch at the headquarters of the Ministry of Science and Technology for the Secretary of Special and Strategic Programs and her staff,** who are responsible for the ministry's bioeconomy agendas. Now, the secretary will hold a workshop on alternative proteins for government officials, parliamentarians, and researchers.
- **Back by popular demand, the Good Food Conference® returns September 18-20** in San Francisco at the Fort Mason Center for Arts & Culture! [Sign up](#) to be the first to know when registration goes live (and watch the video in the link to get inspired). Please reach out to [Natalia Veinott](#) if you're interested in sponsorship opportunities.



## **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 APAC released its latest [report](#) titled “The Untapped Potential of Mung Beans for Alternative Proteins” and hosted a supporting [webinar](#) that drew more than 100 live viewers. Co-authored by GFI APAC SciTech Manager Wasamon Nutakul, Ph.D., and GFI APAC Corporate Engagement Manager Jennifer Morton, the report offers a roadmap for resolving complex supply-chain challenges and overcoming decades of R&D neglect to unlock the underutilized plant protein.
- Lead Scientist Elliot Swartz, Ph.D., hosted this month's [Cultivated Meat Collaborative seminar](#) (GFI's invite-only webinar for cultivated meat companies) featuring presentations from [Metalytics](#) and [Upstream Applied Science](#). The seminar addressed two of the most important long-term levers for cost reduction: optimizing cell feed to cell metabolism and the creation of accurate models to predict costs and yields.
- Lead Scientist Claire Bomkamp, Ph.D., published a new [cultivated meat end products deep dive](#), which explains the science behind cultivated meat end-product design and characterization. It also explores opportunities for innovation and open-access research in end-product development.
- GFI APAC SciTech Specialist Maanasa Ravikumar, Ph.D. hosted a [Science of Alt Protein webinar](#) featuring Dr. Shigeki Sugii, an A\*STAR researcher and founder of Singapore-based startup ImpacFat, who discussed deriving fish cell lines for cultivated fat.
- GFI India held a meeting with senior leaders at the Indian Institute of Technology Bombay to discuss requirements for the establishment of a Smart Protein Center of Excellence and Innovation Hub there. The institute's leadership emphasized that “the need of the hour is to have access to protein” and expressed interest in collaborating as ecosystem partners with a major focus on fostering R&D and innovation.
- GFI Brazil hosted a roundtable on cultivated meat and fat that featured Vivian Feddern (researcher and GFI grantee from the government's ag sciences research institute, Embrapa) and industry representatives. The event was organized by the School of Administration at the Federal University of Paraná in partnership with the Deep Techs project from the Center for Technological Policy and Management at the University of São Paulo.
- Associate Director of Scientific Ecosystems Amy Huang moderated our monthly Science of Alt Protein [webinar](#) featuring GFI grantee Dr. Fliz Koksel of the University of Manitoba. Dr. Koksel shared how she obtains real-time ultrasonic information on extruded plant-based meats and links this information to the textural and nutritional quality (i.e., protein digestibility) of the end product.
- Academic Community Manager Nathan Ahlgrim visited Penn State University to speak about the policy of cultivated meat at the university's [Science Policy Symposium](#), give a guest lecture in an undergraduate food science class, and meet with five faculty members.

### **GFI influences the public sector to support alternative proteins**

- GFI pulled together a coalition of 47 companies, NGOs, and trade groups to [call for \\$25 million in federal funding](#) for alternative proteins. Signatories included major plant-based and cultivated

meat companies, as well as AMPS Innovation, American Mushroom Institute, Consumer Federation of America, 1890 Universities Foundation, Kraft Heinz Co., and Unilever U.S.

- Based on GFI Israel's recommendations and a workforce survey led by GFI Israel Senior Scientist Tom Ben-Arye Cohen, Ph.D., the Israel Innovation Authority [published a request for proposals](#) (RFP) for the development of workforce training programs in food tech with an emphasis on alternative proteins. The RFP offers to fund up to \$2 million per program and focuses on areas of significance to the industry, such as meat science and tissue engineering for cultivated meat, process development and scaling, flavor and texture analysis, fat substitutes, and more.
- GFI Europe Senior Public Affairs Manager Ivo Rzegotta sent a joint letter from GFI Europe, ProVeg, and the German business body BALPro to German Federal Minister for Food and Agriculture Cem Özdemir to call on the minister to explicitly include alternative proteins in the National Food Strategy. GFI Europe and its partners secured sign-ons from 43 organizations for the attached joint call, including start-ups from across the alternative protein sector, non-governmental organizations, and major corporates. This is the first time that stakeholders from across the German alternative protein sector have developed a joint appeal to policymakers.
- The U.S. Food and Drug Administration (FDA) [gave a green light](#) to GOOD Meat's cultivated chicken, stating that it had "no questions" about the food's safety and composition and making GOOD Meat the second company to receive FDA's clearance. GFI's Policy Team has advocated for a clear and efficient path to market for cultivated meat since our early days, and we are delighted to see this progress.
- Legislative Specialist Drake Jamali and Director of Policy Curt Chaffin successfully worked with State Representative Lakesia Collins (D-9) to pass legislation in the Illinois House of Representatives to create a task force dedicated to advancing alternative proteins in Illinois. Vice President of Communications Sheila Voss testified before the House Committee on Public Health, speaking about the transformational potential of alternative proteins for Illinois businesses, consumers, and farmers. The bill passed the House of Representatives with a 74-29 vote and bipartisan support, and it now moves to the Senate for consideration. If signed into law, the legislation would create a bipartisan task force to study the role alternative proteins can play in the state and specific policy recommendations to foster innovation.
- Maanasa gave a presentation on the state of cultivated meat R&D and co-moderated a roundtable discussion on global cultivated meat regulations featuring policymakers from around the world at Malaysia's inaugural cultivated meat conference, where it was [announced](#) that the nation's first cultivated meat production facility will open next year.
- Wasamon presented on the state of alternative protein science at the [annual scientific conference](#) organized by Thailand's National Science and Technology Development Agency.
- GFI Europe Senior Policy Manager Acacia Smith was one of six industry experts to contribute alternative protein research and innovation priorities to the revision of the European Commission's FOOD2030, a strategic plan for where Horizon Europe funding should be spent.
- GFI Europe Senior Policy Manager Ellie Walden gave a presentation on cultivated seafood at a meeting of the Market Advisory Council, an influential advisory council to the European Commission on fishery policy. The audience consisted mostly of those from the conventional fishing industry, but also some contacts from the European Commission and a few environmental NGOs.

- Senior International Collaborations Manager Hila Goldenberg and GFI Israel VP Strategy and Policy Alla Voldman-Rantzer joined a meeting at the Ministry of Foreign Affairs with the Alternative Proteins Coordinators, a team appointed by the Minister of Foreign Affairs and led by the ministry's Head of Economic Diplomacy Division. The meeting focused on creating a work plan for 2023 that includes the exploration of leading a multilateral treaty centered on alternative proteins.
- GFI India Policy and Communications Consultant Deeksha Bhalaik participated in the Climate-Smart Agriculture roundtable discussion at the [Food Innovation Hub India Annual Meeting](#) in New Delhi and spoke about the value of alternative protein being recognized in the fold of climate-smart agricultural innovations for the Hub in India.

### **GFI influences the for-profit sector to prioritize alternative proteins**

- More than 300 attendees were drawn to this month's Business of Alt Protein webinar, "[Taking Alt Proteins Mainstream](#)," featuring Boston Consulting Group (BCG) sharing their latest report on the sales performance and drivers of the alternative protein industry in the past year. BCG distinguished the strategies between successful companies and those lagging behind and provided practical marketing guidelines for reaching mainstream consumers.
- Jennifer traveled to Bangkok to present at Meat Pro Asia—the continent's largest trade show dedicated to conventional meat production. Her presentation about how meat producers can benefit from the alternative protein boom was [touted](#) in industry recaps of the event.
- As part of our effort to turn India into a manufacturing hub for alternative proteins, GFI India Research Associate Husain Kurawadwala and GFI India Innovation Associate Poorvasha Kar conducted a [masterclass on protein processing](#) with experts from the major life sciences and industrial manufacturing company, [Pall Corporation](#).
- Vice President of Corporate Engagement Caroline Bushnell and Sustainability Consultant Tom Chapman hosted a workshop with the World Business Council for Sustainable Development's plant-forward working group (composed of many large consumer packaged goods companies) on the GFI and FAIRR alternative protein [ESG frameworks](#).
- Innovation and Entrepreneurship Manager Laine Clark and GFI Entrepreneur in Residence Deimena Drašutytė spearheaded an industry roundtable focused on enabling synthetic biology infrastructure for alternative proteins. The roundtable convened multiple stakeholders to discuss collaboration in an effort to expedite capacity solutions, including the UK Government, Accenture, Amazon Web Services, Global Biofoundry Alliance, National Collection of Yeast Cultures, London Biofoundry, Discovery Park, and the University of Kent.
- Founder & President Bruce Friedrich and Investor Engagement Manager Sharyn Murray spoke at the Future Food Tech conference in San Francisco. Sharyn spoke about "Cultivated Meat Investments: The Case for Optimism," and Bruce moderated a panel on alternative proteins and food security that included ADM, PepsiCo, Perfect Day, and the United Nations World Food Program. In addition, GFI co-hosted a reception with Barclays at One Market Restaurant in San Francisco, which brought together over 100 founders, investors, innovators, and industry leaders.
- Startup Innovation Specialist Audrey Gyr spoke on the topic of alternative protein investment at Expo West, the world's largest platform for emerging food brands, as part of a session co-organized with the Plant Based Food Association on the state of the plant-based industry.

- Ivo was the lead speaker at a session on novel foods regulation at the annual event of the German biotech industry and its association, Bio Deutschland.
- Alla provided a keynote presentation at the first public event of Israel's [Cultivated Meat Consortium](#), which convened over 130 participants from different sectors, including researchers, students, entrepreneurs, industry stakeholders, and government representatives. As Alla highlighted at the event, "Regulatory clearances provided recently by the [U.S. Food and Drug Administration (FDA)], following SFA approvals in Singapore, are a sign of confidence and reliability in a new method of making meat. There is no better time to bring together industry and academia to solve white spaces throughout the entire value chain of cultivated meat."
- GFI consultant Chris Krause delivered a presentation about the global alternative protein landscape at this month's [Plug & Play Japan Summit](#), an influential gathering of tech innovators.
- GFI Israel held an exclusive roundtable event for startup CEOs to discuss highlights from the recently released Israeli State of Alternative Proteins Report and to serve as a platform for startups in the field to share challenges they are currently facing. The event was attended by 35 CEOs from the alternative protein industry.
- Audrey participated in the Illinois University Integrated Bioprocessing Research Laboratory's Fermentation Short Course as a guest lecturer. This course brought together more than 60 fermentation professionals from a range of companies, including ADM, Kraft Heinz, Dedert, Tate and Lyle, and others, to discuss scaling up fermentation capacity.
- Laine presented an overview of the fermentation industry and funding landscape at the inaugural Fungi Protein Association (FPA) meeting. Thirty-three companies have joined the FPA to collaborate on challenges and opportunities specific to fungi-based startups, and the group repeatedly expressed gratitude to GFI for its contributions to the launch of the association.
- GFI India Policy Specialist Astha Gaur, GFI India Policy Regulatory Fellow Ojasvi Uppal, and GFI India Senior Innovation Specialist Nicole Rocque co-hosted a webinar titled "Advertising your smart protein products: best practices and challenges" in partnership with members of India's Regulatory Advisory Council. The webinar was a deep dive into the legal framework of advertisements and regulatory compliance.

### **GFI positions alternative proteins as a scalable solution to global challenges**

- Bruce was on a [panel](#) at the Harvard Chan School of Nutrition alongside two Chan professors and an ag economist from the International Livestock Research Institute (moderated by a STAT editor). There were more than 1,000 people on the livestream for the event. Harvard's social media team also created [this two-minute clip](#) about alternative proteins and social justice.

### **Top media mentions:**

- Following the release of GFI APAC's new report on mung beans, GFI APAC Senior Communications Manager Ryan Huling had complementary op-eds published in the [Bangkok Post](#), [Chiang Rai Times](#), and [Lianhe Zaobao](#), Singapore's top Chinese-language newspaper.
- Elliot discussed the GOOD Meat FDA clearance [on the Marketplace Morning Report](#), which airs on more than 800 public radio programs across the U.S. Elliot noted: "It's taken a lot of time and investments to get battery costs down where now we can have electric cars that compete in the marketplace on performance, on price. Just like the vehicle industry took a phased approach to

electric cars by introducing hybrids, cultivated meat products will start off as hybrids too.” Bruce was quoted in [NPR’s coverage of the news](#): “Consumers and future generations deserve the foods they love made more sustainably and in ways that benefit the public good – ways that preserve our land and water, ways that protect our climate and global health.”

- GFI APAC Managing Director Mirte Gosker was quoted by [The Business Times](#)—Singapore’s top financial newspaper—in a long-form feature titled “Where can Singapore take the lead in alternative proteins?” In the article, Mirte notes that the city-state is well-positioned to serve as an “experienced wayfinder and knowledge partner” for the emerging international trade in novel foods, thanks to its diverse food culture, multiethnic population, and world-class research facilities. These factors are all critical to “developing compelling cultivated foods destined for newly opening markets.”
- GFIC Innovation & Entrepreneurship Manager Viola Chen and GFIC Policy Research Specialist Yi Sun were featured in a long-form article in [Bloomberg Businessweek China](#) titled “Chinese plant meat needs ‘long-distance runners’.” The story talks about how deeper and more strategic investments are needed to help the domestic alternative protein space grow at the pace it should.
- A quote from GFI Europe SciTech Manager Seren Kell was used in [The Guardian](#)’s story about Vow producing a meatball made from mammoth DNA. This quote was later included in more than 200 pieces of worldwide coverage after the story was picked up by Associated Press, including [NBC News](#), Canada’s [CBC News](#), and Australia’s [Sydney Morning Herald](#). Seren’s quote emphasizes the climate benefits of cultivated meat: “By cultivating beef, pork, chicken, and seafood we can have the most impact in terms of reducing emissions from conventional animal agriculture.”
- GFI India Communications Manager Mansi Virmani worked with GFI India alumnus Ambika Hiranandani to co-write an op-ed titled “[Alternative protein – here’s the story of plant-based meat and of a green revolution too](#)” for CNBC-TV18, India’s leading business news channel.

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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

