

GFI's GLOBAL HIGHLIGHTS

December 2023

The top highlights:

- COP28 (the United Nations annual climate conference) promised to be “the Food COP,” and it didn’t disappoint.** Team members from our U.S., India, Brazil, and Asia Pacific teams—as well as our strategic partner in China, GFI Consultancy (GFIC)—were busy hosting and speaking on panels (including a GFI-organized official [side event](#)), attending alternative protein-focused workshops, and meeting with key influencers in climate policy from all over the world. Alternative proteins were firmly on the climate and food security agenda of global policymakers—GFI spoke from the Danish, Swedish, Thai, Singapore, and Malaysian pavilions, as well as many non-government pavilions and at food systems-focused events (e.g., [this one](#)). Founder & President Bruce Friedrich and U.S. Department of Agriculture (USDA) Under Secretary and Chief Scientist Dr. Chavonda Jacobs-Young jointly emphasized the importance of government backing for alternative proteins and USDA's global leadership in funding alternative protein research.
- The United Nations Environment Programme (UNEP) released a [landmark report](#) focusing on alternative proteins as a tool to slash food system emissions.** GFI has worked with UNEP on this report from its point of conception almost two years ago and supplied three co-authors and three co-reviewers. Read our summary of the report [here](#).
- The commission convened by Nobel Laureate in economics Michael Kremer to support food systems innovations that will address climate and food security released a [policy brief](#) supporting alternative proteins.** GFI teams submitted multiple briefs and responses to Kremer’s team in the lead-up to the report, which credits GFI’s input. Read our one-page summary [here](#).
- GFI hosted a webinar featuring the Department of Energy Industrial Efficiency and Decarbonization Office ([IEDO](#))** that provided an overview of the Department of Energy (DOE) offices, a deeper look at the stages of commercialization that each office funds, and a preview of an upcoming funding opportunity. Watch the [recording](#) or review the presentation [slides](#) to learn more about these opportunities.
- GFI selected 13 innovative proposals to receive open-access alternative protein research funding through our Research Grant Program.** The selected proposals represent nine countries: Canada, Chile, Denmark, Germany, India, Mexico, Switzerland, the United Kingdom, and the United States. These diverse projects include foundational research across plant-based, cultivated, and fermentation-derived platforms. The Research Grant Program is funded by a generous group of donors to GFI.



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 Brazil published a [report](#) and [executive summary](#) on the “Study of national plant-based proteins with potential applications in plant-based products.” The study was launched by Professor Ana Carla Sato during the University of Campinas's Conexão FEA, a series of lectures on developments in science, technology, food engineering, and nutrition.
- GFI India Acting Managing Director Sneha Singh and GFI India SciTech Specialist Chandana Tekkatte spoke at [Global Bio-India 2023](#), organized by the Biotechnology Industry Research Assistance Council of the Ministry of Science and Technology. Sneha presented an overview of alternative proteins and GFI India's core pillars of work during the conference's inaugural session on Biosciences to Bio-economy, and Chandana presented on biomanufacturing and opportunities for smart proteins in India.
- GFI APAC SciTech Specialist Maanasa Ravikumar, Ph.D., spoke at the Stem Cell Society Singapore Symposium at the Agency for Science, Technology, and Research. Maanasa presented on cultivated meat as a climate solution and highlighted key research gaps across the cultivated meat value chain.
- GFI India organized a GFIdeas India [webinar](#) on career pathways in food technology within the alternative protein sector. Panelists from Impossible Foods, Altruistic Innovations, and Good Meat shared their career journeys and offered insights on professional growth.
- GFIC SciTech Manager Yeshe Liang and GFIC SciTech Engagement Coordinator Sirui Jiang participated in the [American Oil Chemists' Society China Section Conference](#) held in Hainan province. Yeshe gave a presentation on technological developments and prospects for plant-based meat products, which attracted new contacts to GFIC's alternative protein research community.
- Director of Science & Technology Matt Hotze, Ph.D., moderated the December Science of Alt Protein [webinar](#) featuring Dr. Rosalyn Abbott of Carnegie Mellon University. Dr. Abbott discussed how she and her team are bioprinting fat cells into the intramuscular space to improve the taste and texture of cultivated meat.
- Principal Scientist Elliot Swartz, Ph.D., hosted this month's Cultivated Meat Collaborative [webinar](#), which featured presentations from Nordic Virtual Pastures and Tierra Biosciences about their optimization of cell culture media and protein production platforms.
- Associate Director of Strategy & Innovation Simone Costa, Ph.D., and food ingredient company Paragon Pure CEO Chris Gregson, Ph.D., gave a [career pathways webinar](#) at the Institute for the Advancement of Food and Nutrition Sciences [Science Innovation Showcase](#). They shared their



career stories and valuable insights for food and nutrition scientists looking to apply their skills to the alternative protein field.

- GFI APAC SciTech Engagement Specialist Arin Naidu hosted Dr. Iris Haberkorn from the Singapore-ETH Centre as part of GFI APAC's Science of Alt Protein [webinar](#) series. Dr. Haberkorn's talk focused on the potential of single-cell-based value chains, with particular emphasis on microalgae as a dense source of micronutrients.
- Elliot participated in a virtual [roundtable discussion](#) hosted by the [Cultivated Meat Modeling Consortium](#) that brought together experts in the cultivated meat space to discuss research, investments, and future opportunities.
- Senior Lead Scientist Nikhita Mansukhani Kogar, Ph.D., was a guest presenter for an [EarthShift Global webinar](#), “Surveying the environmental impact of alternative proteins via life cycle assessment (LCA).” Nikhita provided an introduction to GFI and plant-based meat and a literature review of current LCAs.
- Academic Community Coordinator Asia Sheehab led a [webinar](#) on pursuing a career in the alternative protein space that featured a conversation with Joshman Villa Macas, a recent food technology graduate of Wageningen University & Research and former president of the Wageningen chapter of the Alt Protein Project (GFI's university chapter program).
- GFI's SciTech team released the Alt Protein Project [annual impact newsletter](#), which synthesized the accomplishments of our global student community and celebrated advancements in alternative protein education, research, and innovation.

GFI influences the public sector to support alternative proteins

- Following the GFI Europe team's submissions to and engagement with government officials, the United Kingdom's new [National Vision for Engineering Biology](#) explicitly included alternative proteins as part of a strategy committing £2 billion in research and development spending for engineering biology over 10 years. GFI Europe's [response](#) celebrates the government's support for the sector.
- Associate Director of Regulatory Affairs Laura Braden, J.D., and Regulatory Attorney Mackenzie Battle, J.D., represented GFI in our role as an Observer Organization at the annual Codex Alimentarius (“Food Code”) Commission session in Rome, Italy. The Commission discussed how Codex should address “new food sources and production systems” (NFPS) like alternative proteins. GFI's recommendation that the Commission continue to gather accurate and up-to-date information about the dynamic and changing field of NFPS was reflected in the meeting [report](#).
- GFI India worked with UNEP to curate a virtual [panel discussion](#) that explored synergies between India's agrarian resources and building an alternative protein industry. Panelists included GFI India Policy Manager Arghadeep Saha, an official from India's Department of Biotechnology, a researcher from the International Crops Research Institute for the Semi-Arid Tropics, and a representative from the Food and Agriculture Organization.
- GFI Israel VP of Strategy and Policy Alla Voldman-Rantzer delivered a presentation at the Food Innovators Network meeting hosted by the World Economic Forum (WEF). Her presentation, “A Blueprint for National Alternative Protein Strategy through Strategic Public Funding,” showcased the Israeli case study and highlighted our progressive approach to developing comprehensive

national alternative protein strategies, setting the stage for further dialogue and innovation via WEF's multitude of platforms.

- A GFI [promo](#) on plant-based meat being a bipartisan issue went out to approximately 20,000 subscribers of Morning Consult's DC-area newsletter. At least 172 legislators and staff clicked through to our Protein Innovation Nation Newsletter.
- GFI Europe was selected to serve as a registered stakeholder with the European Food Safety Authority (EFSA), increasing the team's opportunities to engage in EFSA governance and decision-making processes.
- GFI Europe Senior Policy Manager Alex Holst gave a presentation on cultivated meat at a webinar hosted by Green Transition Denmark, a Danish environmental nonprofit, alongside experts from the Danish bioscience company Chr. Hansen and Finnish fermentation startup Onego Bio. Attendees included representatives from Danish and European civil NGOs, think tanks, and businesses.
- GFI APAC Policy Specialist Ankur Kumar Chaudhary organized GFI APAC's first [policy-focused webinar](#), with content inspired by our inaugural State of the Industry Report for Asia Pacific. The webinar attracted over 100 registrants, including influential attendees from Thailand's National Science and Technology Development Agency, Singapore's Ministry of Sustainability and the Environment, the Singapore Food Agency, the National University of Singapore, Nanyang Technological University, and Singapore's Agency for Science, Technology and Research.
- Alex presented at the [Tech To Table Future Trends Forum](#), hosted by the Bankinter Foundation in Madrid, on the policy needs for scaling up alternative proteins. The event covered a mix of agtech and foodtech topics, as well as big-picture thinking on what interventions private actors can take to move to a more sustainable food system.
- GFI's Policy team produced a [fact sheet encouraging Department of Defense investment](#) in alternative protein technologies under the Defense Production Act. The Policy team will engage various stakeholders to elevate the role of food security under this Act.
- GFI Europe Senior Public Affairs Manager Ivo Rzegotta spoke at the [Bioeconomy Forum](#) of the German Bioeconomy Council at the Federal Ministry of Research. The Forum gathered policymakers, researchers, and nonprofit stakeholders to discuss the latest developments in bioeconomy, including food innovations. Ivo spoke about the progress and potential of alternative proteins and the need for political action in Germany.

GFI influences the for-profit sector to prioritize alternative proteins

- Director of Corporate Engagement Tessa Hale presented at a COP28 United Nations Framework Convention on Climate Change [panel](#) at which the [Protein Transition Call to Action](#) was launched, which GFI coordinated in partnership with Climate Champions/Accenture, Madre Brava, the Jeremy Collier Foundation/FAIRR, and The Race to Zero. The Call to Action asks companies to commit to increasing the availability of plant-based and alternative proteins in their protein portfolio by 2030.
- Startup Innovation Lead Audrey Spence hosted the December Business of Alt Protein [webinar](#) on nutritional



considerations for alternative protein products, which featured a panel of nutrition experts from ingredient supplier dsm-firmenich.

- Audrey gave a presentation on career opportunities in alternative proteins to a group of 30 Stanford MBA and graduate students.

GFI positions alternative proteins as a scalable solution to global challenges

- Bruce [spoke](#) at the [Dubai Future Forum](#), which focuses on addressing the most pressing global issues and includes attendees from various industries and governments. Bruce also [spoke](#) at two events at the [India Global Forum](#)—in both cases highlighting the themes that India can lead on alternative protein research and production, that alternative proteins are a key solution to malnutrition, and that the industry will pay huge dividends to the Indian economy by creating jobs across the country and high-value markets for Indian farmers.



Top media mentions:

- Lead Scientist Adam Leman, Ph.D., and Senior Advisor to the President Shayna Fertig were both quoted in a *Washington Post* [article](#) on fermentation. Adam noted: “We’ve been using fermentation for millennia to make food products. We’re able to use a lot of the same types of microbes that we’ve been using for a long time, but just using them in better ways to offer up more solutions for protein, for fats, and generally for feeding all the people that we can.”
- Shayna was referenced in a *Grist* [piece](#) covering the UNEP report: “Shayna Fertig ... said efforts to improve animal agriculture are necessary but shouldn’t come at the ‘expense’ of developing substitutes for meat and dairy.”
- GFI Israel CEO Nir Goldstein was interviewed for an [article](#) on Ynet, Israel’s most popular news website. Excerpt: “While global demand for fish and seafood is expected to increase by 14% by 2030, it is not possible to increase fishing without significantly harming the health of the oceans. That is why many initiatives have arisen in recent years to produce fish substitutes ... A shift to local production using these innovative technologies will strengthen national food security, help protect the oceans, and provide an answer to a growing population of consumers who are looking for seafood that does not harm the environment.”
- Nir [shared his insights](#) on the *Time to Think* podcast about the various aspects of food security issues in Israel. He was also featured in an interview on a popular Israeli radio station, sharing the potential of alternative proteins in mitigating these challenges.
- A [feature](#) on smart protein as a positive climate, nutrition, and global health intervention was published in *India Today* (the most widely circulated magazine in India) and quoted GFI India Communications Manager Mansi Virmani: “If we want to feed the growing billions who, because of upward mobility, are demanding more and more meat and dairy products, as animal agriculture continues to impact the environment, we need to find ways to meet that demand.”

- Mansi shared key data points about the plant-based meat sector in India for an [article](#) in the print and online editions of the *Times of India*, the fourth-largest newspaper in India by circulation and largest largest-selling English-language daily in the world.
- GFI India Policy Specialist Radhika Ramesh shared an [op-ed](#) on food systems resilience in MoneyControl, India's largest digital finance news platform. Excerpt: "Although navigating a complex issue of food-system transformation will require region-specific evidence, coordinated action at the international level is needed to build supportive mechanisms. Innovation-led food sources are rising in popularity to showcase how they can feed a rising population more sustainably and efficiently."
- The influential German bioeconomy magazine *Life Sciences* published a [guest article](#) by Ivo (pages 18-20) on the role of alternative proteins in creating a sustainable and resilient food system and the importance of public investment. Ivo was also quoted in an [article](#) on novel food companies in Europe (pages 43-48) for the magazine *European Biotechnology*.

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

