

The Good Food Institute

STRATEGIC PLAN V.6, AUGUST 2020

I. The Good Food Institute: Creating a sustainable, secure, and just protein supply.

The Good Food Institute harnesses the power of markets and food technology to make alternative proteins the new normal. What follows is a description of our programs and plans and why we feel they represent humanity's best hope for transforming agriculture away from the industrial use of animals. To review some of our specific successes, please see our most recent annual review at gfi.org/2019.

A. The Challenges

Industrial animal agriculture is unsustainable: Mounting scientific evidence demonstrates that current methods of industrial meat production waste land and water and contribute to vast environmental degradation. They are accelerating climate change and the rise in antibiotic-resistant infections. Plus, the United Nations has declared that the top two drivers of zoonotic diseases are animal protein consumption and the intensification of agriculture. These effects jeopardize human health and global food security.

Information alone does not drive behavior change: Despite increasing acknowledgment of these facts, per capita meat consumption continues to rise in the United States and around the world. The Food and Agriculture Organization of the United Nations predicts that meat consumption will increase globally by 73 percent between 2010 and 2050.

B. Our Theory of Change

Taste, price, and convenience are consistently shown to be the most salient drivers of consumer choice. By producing meat, eggs, and dairy that outperform on these drivers directly from plants or cells, we can safeguard our global food supply while decreasing emissions; minimizing land, water, and antibiotic use; and eliminating unnecessary animal use.

To maximize our impact and the effectiveness of our supporters' contributions, the GFI team relies on three pillars:

- **System-level solutions.** We will make the greatest impact by shifting the broader foodscape rather than placing the onus for change on individual consumers.
- **Big-picture perspective.** Our approach crosses the plant-based and cellular agriculture industries, the supply chain, a variety of key market sectors, international boundaries, and the coming decades. This allows us to help spot and address industry-wide challenges today and forecast and avert future obstacles.
- **Free knowledge sharing.** In a field where many innovators are seeking novel solutions to the same set of problems, GFI's work is not hampered by IP laws or trade secrets. Our research, data, and insights are open-access and support the advancement of every innovator in this space.

We will make a sustainable, healthy, and just food system the status quo.

II. **GFI's Programmatic Departments: SciTech, Policy, and Corporate Engagement**

GFI has three programmatic departments to accomplish this task: science and technology, policy, and corporate engagement. Our communications department serves as a force multiplier, taking the work of our programmatic departments into key spheres of influence. And our international affiliates (Brazil, Europe, India, Israel, and Asia-Pacific) work closely with GFI's executive department to scale GFI's programs globally.

A. Science and Technology Department

GFI has really put cultivated meat on the map for us. We're grateful to have GFI's team of scientists analyzing the areas of need in this burgeoning industry and driving conversations about how existing players can become partners in progress.

—Lavanya Anandan, head of innovation field, cultivated meat & future foods; Merck KGaA, Darmstadt, Germany

Little scientific R&D has been conducted on plant-based or cultivated meat outside private industry. Before GFI, no one had mapped the science of producing either type of meat, and all work happened at the corporate (and thus IP-protected) level.

GFI's science and technology (SciTech) department develops and promotes the science of plant-based and cellular agriculture and forges a path to commercialization. GFI's scientists and innovation specialists are the global experts in these sectors and work to ensure that (1) a roadmap exists for them, (2) the best scientists and

entrepreneurs are engaged in alternative protein R&D and innovation, and (3) significant funds are dedicated to accelerating the transition of the global food system.

Our SciTech department accomplishes these tasks through three principal activities:

- **Analyzing Current and Future Technical and Scaling Challenges for Plant-Based, Fermentation-Derived, and Cultivated Meat**

GFI's SciTech team conducts detailed technical analyses of the plant-based, fermentation-derived, and cultivated meat sectors, including identifying and articulating major technical challenges, forecasting growth bottlenecks, and evaluating the cross-applicability of technologies. GFI shares the findings in the form of white papers, peer-reviewed journal articles, and industry reports. All these analyses are published through our website as open-access resources, heavily publicized, and continually updated.

They seek to reveal research and commercialization opportunities that address knowledge gaps or white space in the commercial landscape. GFI identifies researchers and entrepreneurs in academia and industry with the skill sets and expertise to address these opportunities and supports their exploration by launching new research projects or commercial ventures.

Recent publications by GFI scientists include "[The Business of Cultured Meat](#)," the cover article of *Trends in Biotechnology*'s June 2020 issue, as well as "[Meeting the Needs of the Cell-Based Meat Industry](#)" featured in *Chemical Engineering* in October 2019. Additionally, we updated our [analysis of culture medium costs and production volumes](#) and added an in-depth analysis of bioengineering and cell culture media to our [Cultivated Meat 301](#) series, an exhaustively cited collection of articles delving into the technical advances and considerations of all aspects of cultivated meat. Finally, the team continues to expand engagement to new audiences. [New Food magazine](#), with an estimated readership of 34,000 food industry professionals, spotlighted a GFI scientist in an interview on the future of cultivated meat.

Our most notable recent publication on advancing the plant-based meat industry is a seven-page spread on [formulating with animal-free ingredients](#) in *Food Technology*, the flagship publication of the Institute of Food Technologists, the world's largest society for food science professionals. Our open-access [plant-based meat manufacturing guide](#) provides an in-depth review of extrusion for the production of plant-based meat, as well as a directory for ingredients, pilot facilities, and co-manufacturers.

GFI's Sustainable Seafood Initiative focuses on the unique challenges and opportunities in plant-based and cultivated seafood. Our full-time scientist focused solely on cultivated seafood has enabled us to launch new resources and partnerships. The [Phylogenetic Index of Seafood Characterizations](#) (PISCES) offers detailed compositional and structural characterizations of seafood products to guide

development of convincing alternatives. GFI has also partnered with Kerafast to establish a [repository of cell lines](#) relevant to cultivated meat, including seafood, to streamline the process of sharing cells and reduce duplicated efforts. IndieBio founder Ryan Bethencourt opined: “Soon companies will be able to order meat and seafood cell lines to start developing new products based on different cell-based meat lines. ... This new capability shifts the technological arms race to a new stage very similar to the early PC [personal computer] era.”

GFI also performs literature reviews and industry interviews on an ongoing basis to remain current with advances in the field and in related but distinct disciplines with relevance to plant-based and cultivated meat, such as advances in biomedicine that are translatable to cultivated meat. The SciTech team works with our communications department to disseminate our findings through webinars, blogs, interviews, and other relevant channels. Our goal is to generate excitement in the scientific community and foster a better understanding of the need to develop alternatives to conventional meat.

Finally, the SciTech team has created a scientific advisory board composed of industry and academic experts in plant-based and cultivated meat research and adjacent disciplines to evaluate these fields, identify novel opportunities for research, and provide guidance on the SciTech team’s strategy and goals.

These efforts enable both GFI and scientists around the globe to understand the state of the science and engineering involved in innovative alternatives to animal products and to direct further R&D accordingly. This work is designed to inspire more scientists to devote their vocational lives to these fields and to minimize duplicative work.

- **Mobilizing Funding for Open-Access Research and Early-Stage Commercialization**

GFI’s research grants are enabling fundamental open-access science. That, in turn, enables scalability and an ecosystem approach to accelerating this space in ways the private sector alone cannot.

—Max Elder, research director, Institute for the Future

The SciTech team generates additional scientific research by seeking funding opportunities. We identify opportunities from top governmental grant-making agencies, such as the National Science Foundation, European Commission, U.S. Department of Agriculture, and U.S. Department of Energy, and private foundations, including the Bill & Melinda Gates Foundation, David and Lucile Packard Foundation, and Foundation for Food and Agriculture Research. Because they are immersed in analyzing the state of the plant-based, fermentation-derived, and cultivated meat sectors and identifying critical technical barriers, our scientists are well positioned to handpick the best possible researchers to apply for these opportunities.

Additionally, the SciTech team identifies public and private funding organizations from around the world whose missions align with one or more of GFI's goals to reduce global poverty, combat climate change, and improve human and farm animal health and well-being. We develop relationships with these organizations to provide education on the direct positive impacts of alternatives to animal agriculture and the critical need for additional R&D in this field. These activities aim to increase the number of funding agencies providing grant opportunities focused on advancing plant-based and cultivated meat.

Finally, due to the overall shortage of open-access plant-based and cultivated meat research and the urgent need to catalyze this research, we launched our own research grant program. Since its inception in 2018, we have funded approximately seven million dollars' worth of research from 13 countries across five continents.

Leveraging SciTech's analyses, technical expertise, and industry connections, GFI's scientists are uniquely positioned to identify critical technical barriers and white space research areas that will accelerate the plant-based and cultivated meat industries. We anticipate that the grant support provided through GFI's research program will result in many significant positive impacts, including the following:

- Our funded researchers will publish many high-quality peer-reviewed journal articles, which will establish plant-based and cellular agriculture as robust areas for further scientific inquiry, inspiring more top scientists to dedicate their labs and careers to these pursuits.
- Startups and established companies will use the research to develop, produce, and sell high-quality products.
- As these fields become more developed and based on the concerted work of GFI's SciTech team, universities will create plant-based and cultivated meat training programs and research institutes.

- **Inspiring the Next Generation of Innovators**

GFI is focused on moving the most successful entrepreneurs, tissue engineers, synthetic biologists, plant biologists, and others into alternative protein technologies—as founders of new and transformative startups; as employees at plant-based and cultivated meat companies; and as doctoral students, post-docs, and group leaders at top universities.

To this end, GFI reaches out to premier universities for science, engineering, business, and entrepreneurship. We have identified the top dozen for plant-based meat research and the top dozen for cultivated meat research. We encourage researchers at these universities to use their expertise for innovative plant-based and cultivated meat projects. Our innovation specialists and scientists deliver presentations in classes, departmental symposia, and student forums to markedly increase the number and caliber of scientists and entrepreneurs in these sectors. Online, we create community

spaces and tools (such as the newly expanded [GFIdeas community](#) and the [collaborative research directory](#)) that enable scientists and entrepreneurs to collaborate—which in turn broadens the range of innovation in both academia and the private sector.

Our global student group program, the [Alt. Protein Project](#), is active at five top universities in the United States and Israel, and we are recruiting student group leaders at other leading STEM schools around the world. The Alt. Protein Project is an action-oriented program designed to help students engage their peers and faculty on the subject of alternative proteins, advocate allocation of university resources to alternative protein research and curricula, conduct their own scientific research, and found their own businesses.

In collaboration with universities and companies, we are developing on-campus and online courses and workshops to educate students about the science and techniques required to develop the next generation of alternatives to animal-based foods. We supported the introduction and continue to support the ongoing development of a project-based engineering course on plant-based and cultivated meat at UC Berkeley, launched and continue to support and teach a course on the science of plant-based and cultivated meat at Stanford University, and released a massive open online course with more than 5,500 participants since January 2019. Additional resources for online learners and classroom students include our [student guide](#) and an under-construction database of all university courses about alternative proteins currently taught, including their associated slide decks and reading materials.

Through our Advancing Solutions in Alternative Proteins (ASAP) initiative, our SciTech team canvasses insights from top industry experts to identify crucial challenges and develop solutions. We implement these solutions with leading individuals and organizations to systematically advance the industry. For example, research from our ASAP project suggests a gap in the market for tasty, affordable seafood alternatives. Accordingly, we recruited and are advising a seasoned entrepreneur who is building an alternative seafood company to address this gap. GFI also works with expert venture studios, offering them our unique expertise through a prioritized list of high-impact commercial ideas informed by our ASAP work. The venture studios use GFI’s “idea flow” to decide among company concepts and then capitalize on their own company-formation and operational expertise to build the concepts into fully fledged companies.

GFI has been instrumental in the foundation of at least eight plant-based and cultivated meat companies, and our programs and resources have helped many dozens more. Additionally, GFI founded two venture capital funds—New Crop Capital and Clear Current Capital—to provide funding, coaching, and other resources to plant-based and cellular agriculture companies.

We also work closely with entrepreneurs developing companies not directly influenced by the insights of our ASAP work. In this capacity GFI provides technical and commercial consultation, introductions to industry contacts, connections to funding opportunities, and access to external experts to aid in the scientific development of their products.

To assist early-stage companies as well as more established startups, we maintain a [talent database](#) to help companies quickly and more easily find mission-aligned technical and commercial talent. A recruiter for a large alternative protein company said of the resource (which contains 500+ candidates interested in working in alternative proteins): “GFI’s talent database is our go-to resource for finding the best candidates in our space.”

GFI also takes an active role in ensuring that the research we fund via our grant program translates into commercially viable technologies and end products. We work closely with our grantees to explore the possibility of forming companies around their research or partnering with large companies who may be interested in licensing or acquiring parts of their novel technologies. GFI is also exploring the possibility of providing a platform for partnership opportunities with key industry players by holding dedicated pitch days for our grantees to present their research to the industry. While we encourage the commercialization of technologies developed by GFI’s grantees, the bulk of the research sponsored by our grant program nonetheless remains entirely open-access.

In collaboration with our corporate engagement department, GFI’s scientists also work closely with leading food industry partners to scout technologies that address barriers in bringing plant-based and cultivated meat to market. The SciTech team develops relationships with major food manufacturers and ingredient suppliers to determine their needs. Thus, the team serves as a bridge to food innovation and biotechnology incubators with unique insight into plant-based and cellular agriculture technologies.

B. Policy Department

Policy can be the difference between success and failure for alternative proteins. Governments can incentivize incumbent industries through funding and protectionist regulation, or they can make launching new businesses and innovative products easier.

GFI’s theory of change is based on the idea that consumers will choose alternative proteins when they are as inexpensive, delicious, and ubiquitous as animal products. From a policy perspective, we will achieve success when alternative proteins are on a level playing field with animal products. **GFI’s policy department** exists to ensure that governments do not impose hurdles that drive up the costs of or prevent access to these foods, and that, so long as governments support R&D in conventional animal agriculture, equal public support is devoted to accelerating progress in alternative proteins.

- **Removing Hurdles to Alternative Proteins**

We advocate a clear and efficient path to market for cultivated meat and a level playing field for plant-based meat, eggs, and dairy.

First, we ensure that cultivated meat (including fish and seafood) can come to market without unnecessary regulatory burdens. We brief policymakers on the production process for cultivated meat and relevant safety controls. Our policy team and GFI's international affiliates use a briefing document that encourages establishment of a clear and efficient path to market that ensures consumer safety and confidence. Further, in coordination with the companies in this space, we testify at hearings and submit [formal regulatory comments](#) that respond to regulators' questions about the safety and fair labeling of cultivated meat. In 2019, we arranged a tour of a cell-culturing company's lab for the U.S. Government Accountability Office, which prepared a [report on federal oversight of cultivated meat](#) that it delivered to Congress the following year.

Our biggest legislative win to date was ensuring that the fiscal year 2019 agriculture appropriations bill did not include a harmful rider that we energetically fought, working in particular with U.S. senator Jeff Merkley and his staff. The rider would have required new regulations and given sole jurisdiction over cultivated meat products from livestock and poultry to the USDA.

Mindful that opposition to technology has been a major hurdle to innovation, we also develop relationships with other nonprofit organizations, including those focused on the environment, global hunger, consumer rights, animal welfare, and food safety, to familiarize them with cultivated meat and neutralize potential opposition. In 2019, we established a policy office in Washington, DC, which serves as our campaign headquarters and provides an ideal setting for meeting with the leaders of other nonprofit organizations. GFI is uniquely qualified to lead this initiative to engage the nonprofit community. Doing so also supports our other policy priorities.

We also help create a level playing field for plant-based meat and dairy by working with federal food agencies, members of Congress, and state legislatures to support commonsense labeling rules that place plant-based products on equal footing with their animal-based counterparts. For example, we submitted a petition proposing a new federal regulation that would explicitly allow compound names such as "soy milk" and "veggie bacon" and filed formal written comments on proposals by cattlemen and dairy groups and an amicus brief supporting the right of Blue Diamond to call their product "almond milk." We lobbied Congress in opposition to labeling restrictions, and we actively opposed [legislation](#) in more than half the U.S. states that intended to censor plant-based meat and milk labels.

To prevent the government from imposing unnecessary restrictions on the labels of alternative proteins, we use strategic litigation. As of August 2020, we have two active

cases with American Civil Liberties Union and their local affiliates, the Animal Legal Defense Fund, and Tofurky challenging laws that prevent food companies from using terms such as “sausage” or “hot dog” on their labels unless the product is derived from “harvested” animals. Our legal advocacy prompted a federal court to [block Arkansas from enforcing its law](#) because the judge concluded that our lawsuit was likely to prevail on its claim that the law violated the First Amendment by censoring free speech.

- **Leveraging Government Resources to Accelerate Progress**

We have a long way to go to achieve parity between alternative proteins and conventional meat, eggs, and dairy. Public funding represents the biggest gap by far. Governments have directed very little funding to support alternative protein research. By our estimates, the U.S. government spends more **in a single day** on research that props up industrial animal agriculture than it has spent over all time on plant-based meat research.

Our policy department works collaboratively with our SciTech department to leverage government resources to accelerate research to advance alternative proteins. We meet with congressional offices and federal agencies to communicate the [vital need](#) for public research funding to speed progress for plant-based and cultivated meat.

In 2018, GFI director of policy Jessica Almy spoke at the first-ever congressional briefing on cultivated meat R&D, sponsored by the House Research and Development Caucus and its chairs Rep. Barbara Comstock (R-Va.) and Rep. Bill Foster (D-Ill.). In 2019, we met and submitted [comments](#) to White House officials in the Office of Science and Technology Policy and the Office of Management and Budget, urging investment in alternative proteins.

We submitted appropriations-report language requests for four consecutive years, beginning with fiscal year 2018, to key members of Congress, asking them to include language directing agencies to fund research on plant proteins and cellular agriculture. In 2020, we rallied a host of companies and nonprofit organizations, including Unilever United States and Merck KGaA, Darmstadt, Germany, to sign a [letter of support](#) for our legislative efforts.

Our lobbying efforts have seen some success: Each year appropriations reports have incorporated language encouraging research funding for plant proteins, including as alternatives to conventional animal products. However, we are mindful that positive report language alone is not enough. We continue to lobby Congress to direct that USDA spend a designated dollar amount on this research. (Our ask in 2020 is \$20 million.)

Additionally, we have made submissions to the [House Committee on Science, Space, and Technology](#) and the [Senate Democrats’ Special Committee on the Climate Crisis](#),

urging these committees to establish an interagency Alternative Protein Initiative modeled after the National Nanotechnology Initiative, potentially with stimulus funds. Thanks in part to our advocacy, the Breakthrough Institute, a global research center focused on technological solutions to environmental and human development challenges, [actively supports this effort](#).

We have also worked with Center for the Blue Economy, which put plant-based and cultivated seafood into their “Blue New Deal”; Center for Biological Diversity; and Consumer Federation of America, among others, to enlist their support for open-access alternative protein R&D funding from the U.S. government.

We plan to replicate this work at the state and local level beginning in 2021.

C. Corporate Engagement Department

Driven by a sense of urgency to mitigate the impact of animal agriculture on sustainability, climate change, and global health, [GFI’s] main priority is to foster and support innovation in the alternative protein field. ... The vast majority of entrepreneurs have told us time and time again how important GFI has been in eliminating many of the challenges in establishing startups.

—AgFunder news

The GFI team has been amazing. ... They were instrumental in hooking us up with great partners that allowed us to jumpstart our efforts. And without GFI and the corporate engagement team, we would be two, three years behind. ... Hats off and thank you very much for being such an incredible part of our success.

—Eric Christiansen, CMO, Perdue Farms

There is no shortage of new and innovative products that have replaced their outdated counterparts—think kerosene replacing whale oil, refrigeration replacing ice blocks, cell phones replacing (or even leapfrogging) landlines, digital photography replacing physical film, and cars replacing horses and buggies. While corporations may have motivations for change that include environmental and health concerns, all investments have to be profitable. **GFI’s corporate engagement department** works to replicate past market transformations by showing companies of all sizes, from startups to multinational corporations, how alternatives to animal products can be profitable while meeting environmental, social, and governance goals.

GFI’s corporate engagement team focuses on six principal initiatives:

- **Supporting the Most Innovative Alternative Protein Companies**

The department works with both startups and established companies in the sectors of meat, eggs, and dairy made via fermentation or from plants or cultivated cells. This includes reviewing business plans and pitch decks, conducting market research and

branding exercises, recruiting top talent, and mentoring on all facets of starting and running a company. The corporate engagement team also collaborates with other GFI departments to help startups with regulatory issues, public relations, industry connections, science, and other areas where we can add value that the companies would have trouble securing without us.

GFI creates and maintains a variety of high-impact resources to help aspiring entrepreneurs turn their ideas into high-growth, impactful companies. The first resources in this journey are the startup manual and GFIdeas community. The startup manual is a highly detailed step-by-step guide to creating a successful alternative protein company. The GFIdeas community is a forum for founders to support one another and discuss business and technical challenges and solutions. Since GFI's inception, we have brought the GFIdeas community together for monthly calls, usually involving presentations that are useful to entrepreneurs and startups. Our SciTech team holds a monthly call that is similar but limited to cultivated meat companies.

The second group of resources comprises GFI's talent database, investor database, and supplier database. The talent database helps growing startups find mission-aligned talent; the investor database helps startups identify investors active or interested in the space; and the supplier database helps startups connect with partners essential to growing their businesses.

The corporate engagement department cultivates relationships with all established manufacturers of plant-based meat, eggs, and dairy to keep them abreast of opportunities and research that can help their businesses grow. We launched the monthly *Plant-Based Insider* newsletter in July 2018 to more efficiently communicate news and opportunities to the entire plant-based business community. We have excellent relationships with all the exclusively plant-based manufacturers, and having one central contact—GFI's corporate engagement department—is exceedingly valuable.

- **Big Food and Meat Company Outreach**

GFI is encouraged by the meat industry's response to plant-based and cultivated meat. Our corporate engagement department develops relationships with senior leadership at the top food companies. We have solidified working relationships with a variety of companies and delivered presentations on opportunities within alternative proteins to some of the world's largest food processors.

Our corporate engagement department works with GFI's SciTech department to evaluate opportunities to replace industrially produced meat, egg, and dairy ingredients in prepared or processed foods. This strategy could place plant-based meat in schools, prisons, and hospitals via foods such as lasagna, enchiladas, sloppy Joes, and pulled "pork," as well as plant-based milk and eggs via cookies, crackers, macaroni and "cheese," and snacks that contain milk or eggs as standard ingredients.

Although most of this work is protected under NDA, one of our successes is publicly noted: GFI influenced Kellogg's MorningStar Farms to reformulate their product line to exclude animal ingredients by 2021, which will remove 300 million eggs annually.

- **Restaurant Outreach**

When one chain restaurant with 1,000 locations adds a plant-based entrée where previously there was none, that is a significant victory for the environment, food security, global public health, and animals.

Our corporate engagement department develops relationships with corporate executives at the top restaurant chains across the United States to increase the quality, quantity, and promotion of their plant-based entrees. We engage in direct outreach and attend conferences for restaurant professionals. To make the transition to plant-based entrees easier, we provide our plant-based meat, egg, and dairy product database to restaurants and offer to connect them to product manufacturers.

We released our first annual *Good Food Restaurant Scorecard* in October 2017, which ranked the top 100 restaurant chains according to a proprietary rubric that evaluated their menus and promotion of plant-based eating. Our third annual scorecard came out in February 2020. Media coverage of the scorecards promotes chains that excel in the area of plant-based offerings and motivates the other top chains to improve.

Between 2017 and 2019, the number of chains that offered no plant-based entrees dropped from 55 to 42. Notable recent launches of plant-based meat in foodservice include Burger King's full U.S. rollout of the Impossible Whopper, Little Caesar's debut of an Impossible sausage pizza topping, Del Taco's introduction of Beyond Meat beefy crumbles, and Qdoba's new Impossible beef.

GFI has conducted testimonials with many restaurants that have successfully added plant-based entrees, and we share them on the [Good Food Scorecard site](#) along with other resources.

- **Grocery Outreach**

Plant-based meat is where plant-based milk was 15 years ago: Most U.S. grocery chains offer plant-based meat options but place them in their own section of the store and rarely promote them. Only customers who seek these products tend to find them. This limits the market to vegetarians and vegans, yet data shows that flexitarians and meat reducers are a vastly larger market for plant-based meat. We use this information, along with primary research, sales data, test-store results, and consumer insights, to influence retailers to merchandise plant-based meat adjacent to conventional meat. Our goal is to emulate for plant-based meat the success of plant-based milk when it moved to the refrigerated case. Indeed, retailers increasingly

place plant-based meat in the meat aisle. We also promote integrated merchandising across other plant-based categories, such as cheese.

To ensure plant-based products are accessible, we focus not only on in-store placement but on the range of products and brands available on shelf. Private-label store brands are usually the most affordable in any category. Accordingly, increasing the number of private-label plant-based products is a retail priority. Private-label food sales have an 18 percent share of the total U.S. food market, but plant-based private label lags, with only a 6.5 percent market share of total plant-based food sales. We have partnered with several key retail private-label teams to educate them on product opportunities and formulation considerations (resulting in a new line and several product launches) and continue to work with retailers who have not yet launched plant-based meat, egg, or dairy options under their private-label brands.

Marketing language that appeals to a wider range of consumers can expand the market for plant-based products. Our corporate engagement department offers guidance to grocery stores to ensure that they understand how to most effectively promote plant-based products in aisle, online, and in their marketing materials. We also seek greater promotion of these products to increase awareness among flexitarians and meat reducers, such as inclusion of plant-based meat in meat-themed store flyers and cross-category plant-based promotions. Our recently launched retail toolkit offers a variety of one-page guides on these and other topics.

Encouraged by the success of the *Good Food Restaurant Scorecard*, we released GFI's first *Good Food Retail Report* this year, which evaluates the top 15 U.S. grocery stores and their banners on their assortment, merchandising, and marketing of plant-based products. This report engages and educates retailers while benchmarking industry progress. *Supermarket News*, *New Hope*, *Food Navigator*, and other industry outlets covered our launch report in depth.

Because price is a key driver of consumer choice, we will undertake a price elasticity study to understand price thresholds for the plant-based meat category and optimal promotional strategy to drive trial (e.g., EDLP vs. high-low). As part of our increasing investor engagement, we will target retailers with venture arms to encourage mutually beneficial partnerships and investment in alternative protein companies.

- **Industry-Leading Market and Consumer Research**

GFI ensures that startups, established companies, and policy authorities are provided objective and impactful research to aid their understanding of consumers. By both conducting our own studies and coordinating the research of academics and other NGOs, GFI makes truthful, actionable information available to support marketing and communication efforts, product and package development, and policy guidance.

GFI conducts market and industry analyses to understand the rapidly growing plant-based and cultivated sectors. Our [state of the industry reports](#) show a dramatic increase in investments, acquisitions, and new companies. Our analysis of [SPINS retail sales data](#) shows the size of the plant-based food industry (\$4.5 billion in sales in 2019) and its growth (31 percent dollar sales growth over the two years ending December 29, 2019). In early 2020, GFI purchased a customized report from NPD SupplyTrack detailing wholesale sales of plant-based meat products in U.S. broadline foodservice. Our dissemination of this data via our [plant-based state of the industry report](#), [GFI blog](#), and [GFI-hosted webinar](#) (which attracted 251 attendees) is the first and only public release of aggregated sales data for plant-based foods in the restaurant and noncommercial channels.

To provide these sectors with actionable insights, we conducted primary research on topics such as sociodemographic profiles of early adopters and effective plant-based product descriptors. This year we published a [peer-reviewed study](#) of consumer perceptions of plant-based and cultivated meat in the United States, India, and China. We also partner regularly with external researchers who offer pro bono work. For example, we worked with Mindlab International to test consumers' implicit preferences regarding plant-based language and product attributes. On the cell-based side, our work has focused on nomenclature. We published a [series of research studies on nomenclature](#) and formed a follow-up project group with Mattson and Memphis Meats to research and develop a [shared messaging strategy](#) for reaching nontechnical audiences.

Our five working papers on consumer adoption of plant-based meat lay the foundation for understanding purchase motivations and determining the best influence strategies to accelerate adoption. The series informs product development and marketing for those working in plant-based meat and provides a “launching point” for actionable research to identify further strategies to promote consumer adoption. We've developed a comprehensive set of priority questions to guide the consumer research of both GFI and external researchers. To foster collaborative research, we facilitate a Slack community and monthly researcher call. Our consumer research findings and researcher coordination efforts distinguish GFI as a go-to partner and thought leader in the plant-based and cultivated meat consumer research space.

- **Sustainable Seafood Initiative**

The Sustainable Seafood Initiative (SSI), a cross-functional initiative across all GFI departments, accelerates the development and commercialization of alternative seafood. The team creates open-access tools to lower the barrier to entry for alternative seafood companies and ensure that researchers and industry have the resources to succeed. The SSI also conducts market and consumer research so that alternative seafood meets consumer needs and expectations and product benefits are appropriately messaged. The SSI policy working group identifies opportunities in federal and subnational policymaking to expand and accelerate alternative seafood

around the world. SSI also convenes diverse stakeholders across industry, academia, policy, and nonprofits by hosting webinars and networking events, speaking at conferences, and publishing an alternative seafood newsletter.

III. **Communications Department**

GFI's communications department ensures that GFI is a leading voice and go-to partner for the media, mission-aligned organizations, and a wide variety of stakeholders working to accelerate plant-based and cellular agriculture. The department's focus areas include ensuring GFI is a primary hub for people in the space by publishing content and maintaining an active presence across our owned media channels, establishing GFI's thought leadership on key topics through earned media, developing highly creative and impactful campaigns to support GFI initiatives, and producing the world's leading conference on the future of meat.

GFI's communications team's focus areas are as follows:

- **Maintaining GFI's Status as a Publishing Powerhouse**

GFI's website is a one-stop shop for anyone interested in learning more about or getting involved in the success of these burgeoning market sectors. Our [audio and visual content](#) and ["essentials" page](#) include both a 10,000-foot and a deep dive into plant-based and cultivated meat, and our blog acts as a news service for developments in alternative protein innovation. Finally, we communicate employment opportunities in this space, along with academic and funding opportunities for aspiring researchers.

Our social media has become increasingly sophisticated, with presence on Twitter, Facebook, LinkedIn, Reddit, and Instagram. Each channel has a unique audience, and we curate and promote content accordingly. In particular, GFI focuses on reaching scientists, entrepreneurs, and corporate food executives.

- **Establishing GFI as a Thought Leader in Earned Media Channels**

Traditional media coverage is vital to all GFI goals, as it creates excitement among key target communities, reaches potential donors, and influences investors to put more money into critical technologies. It also pressures legislators and regulators to take action, influences corporations to add and promote plant-based products, and provides meaningful social media content. In short, one impactful story in the media may be worth hundreds of thousands of dollars in earned media value.

The media team within our communications department works strategically to develop and enhance the reputation of GFI representatives as thought leaders and subject matter experts and to build GFI's presence in key science and top-tier media through a variety of tactics. These include issuing media statements in response to breaking news, creating press advisories and releases to promote GFI's programmatic work, and

pitching op-eds written by our experts to top science and general media outlets.

In addition, the media team responds to dozens of inquiries weekly and takes a targeted approach to building trustworthy relationships with key media voices. In all cases, the team leverages earned media across GFI's owned media channels as well.

In 2019, GFI's outside media presence continued to grow, reaching 8,330 media hits, including stories by the *New York Times*, the *Wall Street Journal*, *USA Today*, *Wired*, CNN, the BBC, and *CBS This Morning*. This was up from 4,867 media hits in 2018; 2,664 in 2017; 579 in 2016; and three in 2015.

- **Developing Integrated Marketing Campaigns That Support GFI's Programmatic Departments**

The GFI communications team focuses attention on the programmatic priorities of the other departments. The department edits; provides design and layout support for reports, fact sheets, and third-party media placements; and develops and executes campaigns to engage target audiences. For example, the department has produced and promoted the [Good Food Restaurant Scorecard](#), the [state of the industry reports](#), and [market research releases](#).

Communications also manages GFI speaker invitations, from the *Wall Street Journal's* Global Food Forum to Future Food Tech to SxSW to TED. GFI executive director Bruce Friedrich's [TED Talk](#) was TED's most viewed talk the week it went live in May 2019. Views exceeded 2.2 million in its first year, with translation into dozens of languages. More impactful still, the [TED Radio Hour](#), one of the top 10 U.S. podcasts, extended our reach to millions more when it featured Bruce and his talk on the climate episode, which aired on more than 600 radio stations.

- **Hosting the World's Leading Event Focused on Accelerating the Commercialization of Plant-Based and Cultivated Meat**

The [Good Food Conference](#) brings together scientists, entrepreneurs, investors, policymakers, and companies working on plant-based and cultivated meat and supporting technologies. The program presents cutting-edge research, strategies and insights for industry growth, and perspectives on regulatory issues. In 2019, the conference debut drew more than 50 world-class speakers and almost 1,000 attendees, selling out three weeks early.

Entrepreneurs, scientists, venture capitalists, technologists, engineers and foodies alike gathered for two days to talk about the future of alternative proteins and how to make them better, safer, faster, more affordable and more sustainably through emerging technologies. It was an amazing experience.

—Tom Mastrobuoni, CFO, Tyson Ventures

The Good Food Conference, a meeting of more than 800 plant-based and cell-based protein entrepreneurs, scientists, investors, and marketers, was the most upbeat, joyful, and youthful American agriculture gathering in years.

—Jerry Hagstrom, *National Journal*

The 2019 agenda included the key players in plant-based and cultivated meat plus leading food and meat companies, including ADM, Tyson Foods, JBS, and Perdue Farms; major meat customers, such as Kroger, Bon Appétit, and CKE Restaurants (Carl's Jr); top investors, such as Obvious Ventures, ADM Ventures, and Tyson Ventures; key suppliers to the plant-based and cultivated sectors, including Dupont, Benson Hill Biosciences, Wenger, and Merck KGaA, Darmstadt, Germany; critical NGOs, including FAIRR, the Institute for the Future, and the Center for Biological Diversity; and other important supporting entities from the Culinary Institute of America to the market research firm SPINS. Reporters for the *New York Times*, the *Wall Street Journal*, *Wired*, the BBC, and additional outlets moderated the panels. Attendees enjoyed meals courtesy of MorningStar Farms, Impossible Foods, Beyond Meat, and JUST.

IV. GFI Affiliates: Making GFI's Impact Global

GFI, their white papers, their publications, and all the work they do on policy has created such awareness. That GFI goes across all these categories and now is expanding globally—it has made the difference in this industry. We're very thankful for all GFI's work.

—Lou Cooperhouse, founder and CEO, BlueNalu

With the launch of GFI Israel in the fall of 2019, we now operate affiliate organizations in five key countries and regions: Brazil, Asia-Pacific, India, Europe, and Israel. Over the past 12 months, these affiliates have built their national and regional teams by hiring experienced food scientists, policy experts, food industry veterans, and communications professionals—more than doubling the size of the international department and substantially expanding the scope and impact of its work.

GFI's executive department works closely with GFI's affiliates to ensure coordination across regions. This enables each affiliate to leverage the most successful efforts of all teams. Affiliates and GFI U.S. focus on the same three strategic areas: science and technology, corporate engagement, and policy. Below are some recent highlights from each affiliate.

A. Brazil

I was born and raised in the animal protein industry and could see from the inside out that there are much more sustainable ways to feed the world. GFI has been very important to connect me with plant-based companies and show me alternative ways of producing food. I am very proud to be part of this revolution.

—Amanda Pinto, innovation manager, Grupo Mantiqueira,
South America's largest egg producer

Shifting Brazil's Research Ecosystem to Alternative Proteins

Brazil's robust scientific ecosystem focuses on agricultural R&D. Instead of building infrastructure from scratch, GFI Brazil prioritizes informing and exciting scientists and producers about alternative proteins within the existing infrastructure. GFI Brazil also promotes GFI's competitive research grant program across the entire plant-based research sector. In 2020, 34 Brazilian research teams submitted proposals to the program. Three projects from two institutions, EMBRAPA and UNICAMP, were selected. Additionally, GFI Brazil has partnered with the Federal University of Paraná to offer the country's first university course on cultivated meat, "Introduction to Cellular Animal Science."

Reinforcing Relationships with Brazilian Ministries

Brazil's government is deeply involved in agricultural sciences, so another of GFI Brazil's top priorities is to develop relationships with the country's executive departments of science, technology, and agriculture, as well as the agricultural research arm of the Ministry of Agriculture. The team has repeatedly met with these agencies and will work with high-level contacts to secure public funding for alternative proteins and create an advantageous regulatory environment for the industry. Our relationships across these agencies are so strong that GFI Brazil was invited to give a keynote presentation at Brazil's 2019 National Science & Technology Conference.

In addition, we recently formed a strategic partnership with ABBI, the Brazilian Association of Bioinnovation (a trade organization), which will further boost our lobbying activities and provide us with direct access to a large group of representatives and senators.

Building the Alternative Protein Industry

Brazil is home to the largest meat company and the largest ground beef company in the world. It also has a robust entrepreneurial ecosystem and significant venture capital. Tapping into this meat industry expertise and strong venture capital environment is another pillar of our strategic plan.

GFI Brazil advises both incumbent food and meat companies and pioneering startups, helping them launch their first plant-based meat products. We are the principal alternative protein advisors on product plans, suppliers, and general strategy for some of the world's largest food and meat companies, and we supported the creation of Brazil's first plant-based meat company, Fazenda Futuro, and helped them launch the fantastically popular Futuro Burger. Within five months of operation, Fazenda Futuro

was valued at \$100 million. The company has already expanded sales throughout Latin America and Europe.

We also worked with the largest egg company in Brazil, Grupo Mantiqueira, to launch their first plant-based egg product, [N.Ovo](#). Mantiqueira stated publicly that GFI's support throughout the two-year product development process was "very important" to eventually bringing the product to market. N.Ovo has been so successful that the company is now expanding into another line of plant-based egg products, including one that will replace scrambled eggs and omelets.

Expanding Our Startup and Investor Network

Although the Brazilian innovation ecosystem is not as developed as those of the United States or other advanced industrialized countries, our work with startups, entrepreneurs, and investors has greatly accelerated Brazil's alternative protein market. We began 2019 with fewer than 15 startups in our network and fewer than three influential investors, but by 2020 we had inspired more than 80 startups and 25 major investors to expand into the market.

We maintain our partnership with [Insper](#), Latin America's highest-profile business university, having collaborated on several projects, including adapting the [guide for GFI startups in Brazil](#), which boasted 750 downloads within two months of publication.

B. India

I was vocally skeptical about the potential of alternative proteins in India, but after collaborating with GFI over the past year, Omnivore is now planning to accelerate the sector's growth in the region in partnership with them.

—Mark Kahn, Omnivore (VC)

Stewarding Research and Development

India is home to many world-class agricultural and biotechnology universities, as well as a deep talent pool. GFI India works with scientists and universities to stimulate alternative protein R&D. Last year, GFI India collaborated with the Centre for Cellular and Molecular Biology and the National Research Centre on Meat to write and present a proposal for cultivated meat research to the Government of India Department of Biotechnology. The project drew [\\$640,000 in funding](#), the largest grant for cultivated meat research anywhere in the world at the time. GFI India also drove the formation of the [Centre of Excellence in Cellular Agriculture](#) at the Institute of Chemical Technology Mumbai, the world's first government-mandated research center for cultivated meat and fermentation.

Building an Innovation Ecosystem

With a proven track record in affordable scaleup, India is key to developing the global alternative protein ecosystem. GFI India works to build partnerships, educate and inspire entrepreneurs and scientists to enter the industry, and increase pioneering companies' chances of success. We launched the Smart Protein Innovation Challenge and enlisted a slate of government and industry partners, from the Government of India's technology transfer initiative to venture capital funds Omnivore, BRINC, and many others. The Challenge has inspired more than a thousand science and business students, young professionals, and entrepreneurs across India to take GFI's alternative protein massive open online course, read our materials, access mentorship, submit in-depth business or product plans, and compete for cash prizes.

GFI India hosts the GFIdeas India online community and webinar series, attracting hundreds of people from the corporate, scientific, and entrepreneurial worlds. As community members, these innovators gain access to GFI India's resources, including market reports, consumer research, and databases of vendors and collaborators. As of August 2020, the team had hosted 15 knowledge-sharing webinars featuring the likes of AAK India and Big Idea Ventures. Thousands of attendees learned key lessons on the science and business of alternative proteins.

Providing Hands-On Support for Entrepreneurs

To accelerate business activity in the alternative protein industry, GFI India's team advises and supports dozens of plant-based, cultivated, and fermentation-derived meat, egg, and dairy entrepreneurs. These include Genelia and Riteish Deshmukh, a high-profile Bollywood-political couple whose new company, Imagine Meats, is already generating great interest in and awareness of the industry. GFI India's team was critical to the formation and launch of this company, supporting it with key partnerships for product development, manufacturing, and distribution.

Raising the Alternative Protein Industry's Profile

GFI India led the conception, organization, and execution of the Future of Protein Summit, the region's premier conference on the alternative protein industry. Highlights include a commitment to creating a consortium for cooperative cultivated meat research from leadership of the top four universities for tissue engineering and a keynote address from the CEO of NITI Aayog, the Indian government's premier policy think tank, that echoed GFI India's own talking points. The summit also showcased six early-stage companies and an investor panel of some of the largest consumer and technology funds in India (DSG, Fireside Ventures, Accel) hosted by Mark Kahn, managing partner of \$100 million+ agrifood fund Omnivore.

Our podcast, Feeding 10 Billion, has created additional visibility for the industry, with guests from across the spectrum of business, science, policy, and innovation. The

unique listenership for season one (pre-pandemic) was already more than 27,000! Apple consistently ranks *Feeding 10 Billion* as the nation's *second-most-listened-to* food podcast—only a celebrity chef ranks higher.

C. Asia-Pacific (APAC)

GFI's Asia-Pacific team is super dedicated and highly effective in delivering results in a way that suits the regional culture. We benefit hugely from their resources, connections, publicity, and technical papers.

—Carrie Chan, co-founder of Avant Meats

Creating Resources That Fill Crucial Knowledge Gaps

Opportunities to advance alternative proteins are greater and more diverse across the Asia-Pacific region than anywhere else. Widely sharing useful information is key to our strategy. In 2019, GFI APAC launched *The Good Food Startup Manual: Hong Kong Edition* and *The Good Food Startup Manual: Singapore Edition*, comprehensive 100-page guides to navigating all aspects of starting an alternative protein company in Hong Kong and Singapore. We also published the *China Plant-Based Meat Industry Report*, a first-of-its-kind report that outlines the state of the plant-based meat industry in China. To leverage GFI's broader work, in 2020 we released various GFI reports translated into Chinese: *Plant-Based Meat for a Growing World*, *Growing Meat Sustainably: The Cultivated Meat Revolution*, and *An Ocean of Opportunity* (our alternative seafood guide). We host all these reports on the [GFI APAC website](#).

Building an Alternative Protein Ecosystem

Asia-Pacific is vast, with wide-ranging comparative advantages in the alternative protein space. China, for example, is the world's leading soy- and pea-protein processor and thus holds tremendous potential as a raw materials supplier for plant-based meat. Raw materials are a key industry bottleneck, so we forge relationships with mainland China's largest plant-protein processors. We encourage companies to broaden their markets to include higher-value-added products. One such company, Yantai Shuangta Food, is a leading pea-protein producer. In February 2020, Yantai Shuangta signed a [pea-protein supply contract with Beyond Meat](#). In April 2020, Beyond Meat entered mainland China's market through a [partnership with Starbucks](#). GFI APAC offers on-demand advice, connections, and resources to startups and accelerators in Asia-Pacific and global investors interested in the region.

Raising the Alternative Protein Industry's Profile

Across Asia-Pacific, awareness of the burgeoning opportunities in alternative proteins is building. GFI APAC and strategic China partner GFI Consultancy are crucial sources of information and inspiration. Team members frequently conduct media interviews and speak at high-profile events. These include the [Global Plant-Based Food Summit](#)

Asia 2019 in Shanghai, the second annual Future Food Forum in Beijing, the Asia-Pacific Agri-Food Innovation Week in Singapore, the Temasek-PwC-Rabobank Asia Food Challenge Report launch event in Singapore, the first Alt Protein Meetup in Hong Kong, and a full-day private event in Shanghai focused on plant-based and cultivated meat organized by Ecolab and Seven Star Convention Alliance.

As Covid-19 hit Asia, GFI APAC pivoted to online activities, launching the GFI APAC website. GFI Consultancy launched its own website for mainland China. To generate friendly competition, we created #AsiaAlt100, an inaugural list of the top 100 protein disruptors in Asia. The list includes consumer-facing companies but also highlights the major players in raw material supply and food production. It has proved effective in generating media and public recognition of the alternative protein industry's strong potential and presence in Asia. A number of companies have already reached out to learn what they can do to get on next year's top 100 list. GFI APAC will also host their inaugural Asia Summit on Alternative Proteins 2020 in August. The two-day virtual event aims to make up for missed networking opportunities in the first half of 2020.

D. Europe

We agree with the argument put forward by The Good Food Institute Europe that this amendment [on proposed plant-based censorship laws] would undermine EU policy objectives on climate change, the environment and public health.

—UK Parliament House of Lords, subcommittee report 2019

Driving Millions of Euros into Alternative Protein R&D

The European Union and its constituent governments spend tens of billions of euros on research every year. Almost none goes to alternative protein R&D. Smart, targeted lobbying for more government funding could deliver enormous impact. Therefore, a top strategic priority for GFI Europe is driving more public funding into alternative protein research. Already, we have been key in persuading EIT Food, an EU funding agency, to choose alternative proteins as a focus area for 2021. We achieved this by building relationships and providing technical advice to decision-makers. We estimate that EIT will fund between €900,000 and €3,300,000 in alternative protein projects next year. GFI Europe intends to build on this in the coming years, urging that dramatically more of the forthcoming €80 billion Horizon Europe R&D program be spent on alternative proteins.

GFI Europe also played a key role in embedding alternative proteins in the European Union's Farm to Fork Strategy, its policy roadmap for creating a more sustainable European food system by 2050. In the leadup to its release, GFI Europe engaged extensively with a broad group of stakeholders; met with officials; offered public feedback; and submitted a letter from NGOs, companies, and academics to the EU president. The Farm to Fork Strategy now explicitly mentions plant-based meat, microbe-based meat, and other alternatives to conventional meat as a research focus area under its Horizon Europe program.

Leading Opposition to Labeling Censorship

GFI Europe has been instrumental in organizing efforts to fight restrictive labeling proposals for plant-based meat and dairy products. Coordinated lobbying by GFI Europe, like-minded nonprofits, and a plant-based industry association prompted the European Parliament’s agriculture committee to revisit its proposals. This is a first successful step toward eliminating or substantially weakening an amendment that would ban terms such as “burger” or “sausage” on the labels of non-animal products and thus severely undermine producers’ ability to market plant-based meat across Europe.

We also factored heavily in persuading a UK House of Lords committee to urge the UK government to formally oppose label censorship for alternative protein products. The committee explicitly cited evidence from GFI Europe in its recommendations.

Rallying Allies by Co-founding the European Alliance for Plant-Based Foods

To increase the power of plant-based foods in Brussels, GFI Europe co-founded the European Alliance for Plant-based Foods (EAPF), a multiple-stakeholder platform for companies, NGOs, think tanks, and academic institutions to promote plant-based-food policy at the EU level through direct political outreach and stakeholder engagement in Brussels. GFI Europe sits on the EAPF steering committee and has successfully argued for opening membership to mainstream food manufacturers who will be important allies in our engagement efforts.

Shaping Europe’s Public Conversation on Alternative Proteins

We continue to shape opinion in favor of alternative proteins in Europe through presentations and media appearances. For instance, we helped generate a powerful *New Scientist* article and editorial making the case for public investment in cultivated meat R&D. These high-profile pieces followed a speech given by GFI Europe’s Richard Parr at a conference attended by a journalist and involved extensive conversations between the journalist and GFI team members.

E. Israel

In close collaboration with the Good Food Institute Israel, the Israel Innovation Authority has recently opened new funding tracks tailored specifically to local start-ups and mature companies developing innovative technologies in the alternative protein space. Beyond the financial backing offered to selected companies to fund their R&D efforts, these tracks include a wide array of resources and partnerships with leading researchers in academia, local and global food producers to help accelerate innovation.

—The Jerusalem Post, July 23, 2020

Increasing Government Funding

As Israel is renowned for its innovative spirit, the nation's government prioritizes funding for scientific research and innovation. One of GFI Israel's top priorities is to drive significant portions of this funding into alternative protein research. Along with TASC, Israel's leading consulting firm, GFI Israel developed a national alternative protein policy plan and presented it to the prime minister's office, Ministry of Economy, Ministry of Agriculture, and Ministry of Foreign Affairs. We continue to work closely with one of the prime minister's advisors and are building a consortium of government ministries that will rally around our plan.

Our team's relationship with the [Israel Innovation Authority](#), which manages the \$500 million annual government investments in tech, led to a major alternative protein hearing in July 2020. GFI Israel organized and presented at this event, which brought together hundreds of researchers, innovators, industry professionals, and investors. Through connections made at the hearing, GFI Israel has been working to build several consortiums that will apply for government funding of alternative protein research.

Advancing Academic Research

To expedite the growth of a strong alternative protein research ecosystem in Israel, we must inspire more scientists to enter the alternative protein field and provide them with training in the sciences behind alternative proteins. As a major first step, GFI Israel opened an [alternative protein academic course](#) for undergraduate and graduate students at the Faculty of Agriculture in The Hebrew University of Jerusalem for advanced biochemistry and food sciences. Guest speakers included alternative protein celebrities, such as Prof. Mark Post and Prof. Atze Jan Van Der Goot. Next year we will offer this course in two additional major Israeli universities, Tel Aviv University and Ben Gurion University. Inspired by our course, Technion University has developed its own alternative protein course with support from GFI.

GFI Israel is also at the center of cutting-edge research on cultivated meat. GFI senior scientist Dr. Tom Ben-Arye is the lead author of [an article](#) on cultivated meat in one of the world's most prestigious scientific journals, *Nature Food*. The broader press covered this article, including the *New York Times*, *Inside Science*, *Science Focus*, *New Scientist*, and *Phys.org*. Dr Ben-Arye has presented his research results to multiple academic audiences ([example](#)).

Supporting Alternative Protein Startups

More startups are established per capita in Israel, often referred to as "The Start-up Nation," than anywhere else in the world. Unsurprisingly, Israel is becoming a global hub for alternative protein research and innovation. GFI Israel is dedicated to building on this momentum. Already, we are greatly accelerating the field by clearing bottlenecks and directing efforts toward white spaces. We provided expert technical

opinion for a high-impact cultivated meat company in advance of its successful initial fundraising round. We also provided on-demand counseling and resources to several other cultivated meat companies and labs, four incubators, many venture capitalists, and dozens of entrepreneurs and startups in the alternative protein field.

Creating a Go-to-Market for Alternative Protein Innovation

A go-to-market strategy is central to surpassing the pilot phase. We engage with the largest Israeli food manufacturers to make alternative proteins a key component of their strategies. We delivered workshops to the senior management of two of Israel's largest food companies, and we are working with them on their innovation strategy. One CEO praised GFI as “an eternal fountain of knowledge and connections” and directed his team to maximize the relationship with GFI. We also presented to one of Israel's largest companies, a \$10 billion multinational public manufacturer that serves the agriculture, food, and engineered materials markets. The company aims to invest \$100–\$200 million in food tech, and we are working with their investment team to build a focus on alternative proteins. We also met with Israel's leading meat companies to discuss opportunities in alternatives.

Establishing GFI Israel as an Alternative Protein Thought Leader

GFI Israel has established itself as the nation's thought leader in the alternative protein space. In collaboration with GFI's director of science and technology, Dr. David Welch, we held a series of events on white spaces, including an investor briefing, a crop optimization meeting, a fermentation seminar, and webinars with the agritech community and business school graduates. The events, run in partnership with The Tel Aviv University, Collier School of Management at TAU, Start-up Nation Central, the GrowingIL agtech community, The Israeli Fermentation Society, Weizmann Institute of Science, and others, reached over 1,000 people. GFI Israel has also spoken at multiple industry and university events, including The OurCrowd Global Investors Summit, the biggest investors event in Israel, with over 10,000 attendees.

V. Culture, Transparency, and Strategy

Setting Strategy

GFI was explicitly founded as an effective altruist organization. As such, we will not take on any project that we do not believe to be very high-impact; instead, we seek activities with potential exponential impact, such as helping organizations in other countries, producing documents to serve as the foundation for many researchers and startups, and plotting the path to regulatory approval of new products.

We use a custom variant of Google's OKR system to optimize goal setting. The system defines three layers of prioritization:

- Objectives define GFI's top six focus areas and are written as future outcomes.
- Key results are specific, time-bound, measurable targets that demonstrate the organization's progress toward an objective.
- Actions are the tactical projects required to achieve key results. Each department collates actions into action plans, and all actions have explicit owners and supporters.

Fostering a Culture of Happiness and Support

GFI has six organizational goals, and one is to be “a satisfying and motivating place to work.” We take the work of Daniel Pink in his book *Drive* seriously. Pink asserts that the secret to high performance and satisfaction—at work, at school, and at home—is fulfillment of the deeply human need to direct our own lives, to learn and create, and to do better by ourselves and our world: autonomy, mastery, and purpose. That's what GFI strives to deliver. We encourage feedback to ensure that all team members are as happy and fulfilled vocationally as possible. One team member's entire job is to maximize staff satisfaction.

All GFI team members are encouraged to unplug:

- Everyone is urged to take “deep work” days, to block their Fridays for projects. We encourage people to take mornings for projects as well. Team members are not available on email or for meetings during scheduled deep work times.
- Everyone is urged to turn off email for most of the day and instead schedule times to respond—for example, 9:00 a.m. and 5:00 p.m. Overwhelming evidence indicates that one's productivity decreases and stress level increases with each email check and reply.

We are a mostly remote team, so we make an extra effort to build in regular times to share updates, solicit advice, and bond:

- Every other Monday, we host an all-staff video conference to go over operational issues, discuss ways to improve our organization, or hear updates from the program areas.
- On Wednesdays, we convene again to listen to department-specific updates, with one or two departments presenting on a current project each week. This gives us a chance to learn in depth about what everyone else is working on, ask questions, and see whether we can help one another.
- Finally, on Fridays, we compile a weekly report that includes at least one highlight from each team member's week and an optional water cooler section for sharing a personal update or a step-back reflection.
- To foster bonding, we have a book club, a cooking club, a culture club, an appreciation program, a sunshine committee for team members who have suffered a loss, an anonymous reporting hotline, an onboarding buddy program for new staff, and remote office simulations.

Ensuring Team Satisfaction

Our May 2020 anonymous team survey drew 92 percent participation (placing GFI in the top 2 percent of organizations that use CultureAmp). Mean and median job satisfaction was eight out of 10. Eighty-six percent of team members rated their job satisfaction seven or better. Responses to “what are some things we are doing great” included these direct quotes:

- “Not only am I incredibly passionate about our mission and the way that it is effectively executed by our team, but I actually love the things that I get to work on each day. Most of all, I’m surrounded by the most supportive, kind, and brilliant colleagues. Many of the areas for growth that I’ve noticed for GFI are being actively addressed, which makes me very optimistic about our future.”
 - “I love GFI’s deep work culture and overall support for productivity routines, and I think this culture is part of why GFI is so incredibly efficient. ... I also love everyone I work with, my supervisor is absolutely fantastic, and the work I am doing is challenging and fulfilling.”
 - “Changing the world. Having the best people ever. Being incredibly genuine and caring and supportive and smart and creative. Working on the same team rather than seeking credit or perks.”
 - “GFI is truly a leader in imagining a remote workplace. The many resources available to us to design our own workplace lives are helpful and considerate. The people I work with continue to be some of the most brilliant, thoughtful, driven, compassionate people I have ever known. That is critical to our success.”
 - “GFI is full of some of the smartest people I’ve ever worked with. Everyone I work with is extremely high functioning and contributes to GFI’s mission in significant ways. We also measure everything, and it is true that what gets measured gets done. So that’s great!”
 - “The culture of positivity and abundance. The joy, levity, humor that makes it such a treasure to work here. The people we choose to be a part of our team.”
- **Ensuring Transparency**

GFI is committed to transparency, starting with the [FAQ](#) and [compensation policy](#) that we share with all job applicants. Additionally, much of GFI’s work is detailed in real time on our [blog](#) and in the resources section of our website. Everyone on the team creates a monthly report, and GFI’s executive team curates and distributes monthly highlights to anyone who would like to receive them. By allowing free and open access to all our resources, including scientific white papers and industry data, we eliminate duplicative efforts and accelerate the work of new industry entrants.

VI. Conclusion

The entire GFI team is committed to securing GFI’s place among the world’s most cost-effective nonprofit organizations; we strive to focus every donated dollar on

maximum mission impact. As of August 2020, our team comprises 62 professionals in the United States and 38 across our five international affiliates; three pro bono senior advisors, who dedicate time every week to GFI's mission; a slate of top-notch pro bono lawyers; an advisory council of 31 high-profile, highly respected leaders in their fields; and a constant rotation of talented interns and fellows. See gfi.org/our-team to meet the team.

We warmly welcome your partnership in creating a sustainable, healthy, and just food system. Please contact GFI associate director of philanthropy Clare Bland at philanthropy@gfi.org to get involved.