Cause
The Berkeley Food Institute transforms food systems to expand access to healthy affordable food and promote sustainable, equitable food production. We empower new leaders with capacities to cultivate diverse, just, and resilient food systems.
Berkeley Food Institute is playing an important role advocating for justice and progress within our vast food industry, from more equitable wages to a more sustainable food supply chain.

At its core is the belief that we are not only what but how we eat. Only when we can nourish ourselves consciously and viably can we begin to tackle the colossal job of healing our planet. I choose BFI because I believe its work is making a profound social impact that will reverberate for decades to come. After eight years, BFI has humbly earned its place on campus, teaching new generations how to best feed our hungry planet.”

— Dana Slatkin
BFI supporter, Cal alum and parent, owner of Violet Los Angeles
Dear BFI Community,

What a year it has been. All nodes of our food system have been devastated by the current global pandemic: public health, sustainable agriculture, worker justice, economic resilience, and food access. The shock of these intersecting crises in 2020 required triage and transformation at BFI, and now we enter recovery and expansion mode. As a public education think tank for the good food movement, we provide scientific evidence, institutional support, and a convening space for exchange on action-oriented research. In so many ways, our work since 2013 has prepared us for this moment.

Climate change is real and must be addressed in every industry, including food and agriculture. Diminishing wages and inhuman conditions in our food system cannot abide an advanced society. As communities decide to collect revenues for products that have disproportionate health repercussions (like soda and other sweetened drinks), we are studying these nascent movements to understand their impacts on health and local economies. We have seen public services improved when complicated policies are translated into a usable form by the general public, rather than being left to inaccessible jargon and the lobbyists who navigate it daily. There is a pivotal role for our public education institutions to foster food system leadership and bring more people into conversations about how food is produced, delivered, and consumed.

When George Floyd was murdered by police in 2020, the world saw in graphic detail what food systems workers have known for too long: some are seen as expendable in our sprint to build the world’s richest nation. We know that to fix our food system, we must tackle white supremacy, misogyny, xenophobia, homophobia, and ableism. We must reverse the epidemic of diet-related health disparities, longtime sources of disproportionate suffering for communities of color—a charge that became even clearer as such diseases became risk factors for COVID-19. There is no way around those hard issues; there are only ways through them, aided by knowledge, compassion, and determination.

As we come out of this crisis, we have a once-in-our-lifetime opportunity to remake our food system. That process should be conducted with diversity, justice, resilience, and health—our benchmarks for a transformed food system. We welcome you to join us and bring your lived experience and “research wish lists” to one of our many gatherings, virtually for now, but hopefully in person very soon.

In partnership and mutual learning,

Nina F. Ichikawa

Executive Director,
Berkeley Food Institute
Farming for Resiliency

Elevating World-Class Research

With internationally-recognized experts in a broad range of both natural and social sciences, BFI’s Center for Diversified Farming Systems (CDFS) convenes researchers to find ways to restore ecosystem services, sustain biodiversity, equitably promote farm livelihoods, and ensure food security.

Food systems resilience depends on diversity: a diversity of crops, of farming types, of farmers and food producers, of scales and regions. Even the best researchers on those topics, like those at CDFS, cannot work in isolation, however.

- **23%**
  - Of global greenhouse gas emissions stem from current food systems

- **25%**
  - How much a massive U.S. drought reduced corn yields in 2012, resulting in a 53% global price spike

- **3-5 yr**
  - The California drought from 2011–16 caused 21,000 lost jobs and $2.7 billion in reduced agricultural output

- **3-5 yr**
  - Time invested in agroforestry and cover cropping on some Nicaraguan farms, making them more resilient to Hurricane Mitch’s impacts

The Center for Diversified Farming Systems is positioned to rethink agriculture and find solutions to restore the ecosystem.
BFI raises the profile of diversified farming systems research and connects researchers to farmers and ranchers, non-governmental organizations, policymakers, and members of the public invested in improving our food systems.

**Fostering Rich Conversations**
Through the Diversified Farming Systems Roundtables, we create pathways for CDFS researchers and other leading scholars to reach the Berkeley community. This opens up constructive dialogues on the state of agroecology and related research.

BFI and the CDFS also host the Diversified Farming Systems Listserv, an international community of scholars at the leading edge of sustainable food and farming research and practice. This active group of over 650 participants shares recent data and welcomes students, independent scholars, international readers, and others to its moderated discussion.

**Fueling Activism with Facts**
A BFI seminar led to Bite Back: People Taking on Corporate Food and Winning, which was published in May 2020. Edited by BFI affiliated faculty members Saru Jayaraman and Kathryn De Master, the book dissects corporate power in our food systems. It also offers examples of communities around the world fighting back.

“**We find that while there are structural limitations and tradeoffs to diversifying processes, adaptive capacity can be facilitated by empowering people and enhancing ecosystem functionality to proactively distribute resources and knowledge where needed and to nimbly respond to changing circumstances.**”

— Petersen-Rockney, Margiana, Patrick Baur, Aidee Guzman, S. Franz Bender, Adam Calo, Federico Castillo, Kathryn De Master et al.


BFI also disseminates CDFS’s world-class research and academic publications on agroecology and resilient farming. From a catalog that dates back to 2012, BFI makes that vast body of work publicly available and distributes that work to scholars through the DFS listserv, to BFI’s growing list of 7,500 newsletter subscribers, to food-centric and mainstream media, and to the thousands of supporters following BFI social media accounts.

“No one is going to do this for us. The only way to survive and thrive is to...”

— Bite Back is a truly extraordinary book... about how to create a food system that best prevents hunger, improves health, and reverses climate change.” – Marion Nestle

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1 Petersen-Rockney et al. – 2021
Delivering Data to Policymakers
Along with the Restaurant Opportunities Center, the National Women’s Law Center, Local Progress, and other partners, BFI convened an April 2018 briefing in New York City on our tipping research for local and state legislators from around the country. They reflected on the power of research to eliminate myths and elevate worker stories which otherwise may be buried under an avalanche of industry lobbying.

Since then, several states have taken up and/or passed legislation ensuring a single, fair minimum wage for all workers. Thanks to the hard work of BFI affiliate and Food Labor Research Center Director Saru Jayaraman, and her team of staff and student researchers, we were able to raise the profile of this issue and elevate facts and data where emotions and traditions held sway in the past. Media coverage of the costs of tipping followed, opening the public’s eyes to the practice’s inequitable effects.

21.5 million
people work in U.S. food systems, with 1.5 million added in the past five years, making it the largest employment sector in the country.2

14%
of U.S. workers, or one in seven, work in food systems.2

From our factsheet, “The Rise of Online Grocery Shopping During COVID-19: Impacts on Workers, Consumers, and Communities”

2 The Food Chain Workers Alliance
Gig Working Conditions

In 2020, gig companies accelerated a national push to see their workers legally classified as contractors, potentially saving those companies billions on the benefits and wages that would be due to employees. As this campaign heated up, BFI collaborated with United Food and Commercial Workers Local 5 to spend the summer interviewing grocery gig workers and industry experts.

Those interviews revealed a bleak landscape of grocery gig work, made more precarious by the COVID-19 pandemic and resulting economic disruptions. BFI produced and continues to disseminate a 10-page fact sheet detailing the economics of classifying grocery gig workers as contractors, and the negative safety impacts on workers and consumers.

Addressing Farmworker Conditions

To address working conditions for farmworkers, BFI funded research into third-party social certification programs for agricultural operations, with a focus on those that welcome farmworkers’ participation. One program, the Equitable Food Initiative, was found to promote food safety, healthy soil management, and labor standards, resulting in increased corporate social responsibility. (Zoller, Strochlic, and Getz 2020.)

Journalists and artists play an essential role in shining public attention on farmworker conditions. In 2019, BFI Executive Director Nina F. Ichikawa interviewed BFI affiliate Andrés Cediel and introduced his award-winning film Trafficked in America for a UC Berkeley Homecoming program, co-organized with the Class of 1967 alumni group.
Investing Soda Tax Revenues

A Novel Policy Experiment
When the City of Berkeley became the first municipality in the country to pass legislation taxing the distributors of sodas and other sugar-sweetened beverages (SSBs), BFI Faculty Director Kristine Madsen and other researchers seized the opportunity to research the effects of this novel experiment. Meanwhile, a group of students at BFI partner school the Goldman School of Public Policy completed a first-ever review of how soda tax revenues are invested in municipalities taxing SSBs.

The Goldman School students found that SSB tax revenues are being allocated with a high degree of transparency and community control in the four municipalities where the tax existed. Tax revenue went towards school gardens and nutrition education, capital improvements in public parks (including tap water dispensers), and SSB-abatement efforts like dental care for children.

When other students expressed concern with an ongoing exclusive beverage contract between UC Berkeley and Pepsico, BFI turned it into a teaching opportunity. We hosted an Innovation Challenge and semester-long Case Study Design course, where students could reimagine a more sustainable campus beverage system. We also conducted a full audit of the presence of SSBs on Berkeley’s campus.

Spreading the News
Dr. Madsen’s 2019 findings on the Berkeley soda taxes were covered by 67 media outlets from around the world, including CNN, The New York Times, and NPR. Dr. Madsen also conducted lectures for policymakers in Sacramento and throughout the state in a series of community briefings organized in partnership with the

76% of Berkeley voters in 2014 voted for a penny-per-ounce tax on all sugar-sweetened beverages (SSBs)°

Praxis Project and the California Initiative for Health Equity and Action. Those events were all held in communities most impacted by diseases related to sugary beverages, including diabetes, hypertension, and oral diseases.

**Policy Dissemination**

Building on Dr. Madsen’s research and Berkeley’s experience, seven cities in the U.S. now address diet-related health inequities by taxing distributors of SSBs. The revenues raised by these taxes are being invested in health promotion and human and community capital, with a particular focus on populations that bear the greatest burden of diet-related disease. Tax revenues have supported early childhood education, school and community gardens, and nonprofit organizations focused on food access, among many other activities. Additionally, nearly $7 million in SSB tax revenues were used to address the significant increases in food insecurity caused by the COVID-19 pandemic.

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“I was able to research the influence of one’s food environment on their health and understand how community health inequities can emerge due to disparities in food education and the quality and accessibility of the food available.”

— Sophia Navarro


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The Farm Bill

No Bigger Food Policy
Berkeley has tremendous interest in, and top talent to invest in, the monster omnibus legislation that drives our national food policy: the Farm Bill.

Bringing People Into the Process
BFI created a multipart campaign aimed at public education and academic inquiry into the little-understood, but immense and vitally important, Farm Bill. In Washington, DC, BFI co-organized both a daylong public symposium at American University and a Capitol Hill briefing on sustainable agriculture policy. BFI also co-published “The US Farm Bill: Politics, Policy, and Potential,” a first-ever special issue on the topic in Cambridge University’s Renewable Agriculture and Food Systems.

Making It Digestible
Berkeley School of Public Health graduate Christina Badaracco, who was trained in BFI classes, co-authored The Farm Bill: A Citizen’s Guide, along with environmental writer and researcher Dan Imhoff.

We also led a special seminar for graduate students to understand 2018 Farm Bill negotiations and implications in real-time. Student op-eds from the course were featured in the Fresno Bee, High Country News, and Civil Eats.

Three items account for 99% of the Farm Bill.5

- 76% Nutrition, including SNAP (formerly Food Stamps)
- 16% Crop Insurance & Commodity Support
- 7% Conservation
- 1% Other

“The Farm Bill’s structure attests to the fact that nutrition and soil conservation are inextricably related in a much larger system of production, distribution and consumption, and need to be governed and analyzed as such.”

— Graddy-Lovelace, Garrett, Adam Diamond, and Nina F. Ichikawa.


“Policymakers need public support and data to deliver real change. I commend the work that the Berkeley Food Institute is doing in connecting researchers, legislators, and members of the public to advance working conditions for agricultural workers across the state.”

— Assemblymember Robert Rivas

California Assembly Agriculture Committee Chair

Congresswoman Chellie Pingree of Maine greets American University PhD student and founder of Women Advancing Nutrition, Dietetics, and Agriculture, Tambra Raye Stevenson.
Next-Generation Leadership

Creating an Inclusive Food Movement

With UC Berkeley placed in the top 10 of Top Colleges Doing the Most for Low-Income Students by The New York Times, BFI strives to live up to and expand this accomplishment. BFI recognizes a tremendous opportunity to transition food systems conversations to incorporate the many talents represented in our student body.

Educating and Advancing Student Passion

BFI has a multi-faceted approach to achieving these goals. We launched and administer a Food Systems Minor and a Graduate Certificate in Food Systems to empower UC Berkeley’s student population to develop expertise and join high-level conversations around food. Eighty-three students have now graduated with the food systems minor since its launch in 2015, with 21 more set to graduate in May 2021. In Fall 2020, four members of the Food Systems Minor Committee began an anti-racist assessment of the Minor. Twenty-three students have now graduated with the certificate since its launch in 2019 (with 19 more graduates expected in May 2021).

With COVID-19 sinking many students’ research plans in summer 2020, BFI stepped up to fund 10 graduate student fellows to advance research around healthy food systems and equity from coastal Louisiana, the City of Oakland, and Taiwan, among other places. Their work has since been published and celebrated. Fellow Samantha Derrick translated...
her summer research into the Plant Futures Symposium, which attracted over 500 attendees and earned broad media coverage. Fellow Casey Smith received a 2020 Berkeley Graduate School of Journalism Excellence Award for her project “Glyphosate Woes: The War Against Weeds.” And fellow Jacob Spertus published “Optimal Sampling and Assay for Estimating Soil Organic Carbon” in the Open Journal of Soil Science.

83 students have graduated with the undergraduate Food Systems Minor since its launch in 2015. Another 21 are scheduled to graduate in May 2021.6

23% of UC Berkeley freshmen are first-generation college students6

“BFI does an incredible job of compiling helpful resources surrounding the food landscape, which helped me realize the tremendous opportunity there is in food systems.”

— Anne Wong, Public Health major, Data Science minor, intended graduation in 2022.

Berkeley Student Farms
Experiential learning has a long history at Berkeley, and we are proud to support a range of student-led efforts across campus to “get dirty” at on-campus gardens and farms. Many of them provide fresh fruits and vegetables for the campus food pantry and other areas of need. Together, these efforts are now called Berkeley Student Farms, which we assist through mini-grants and administrative support.

The Results
Today, BFI is looked to as a beacon for leadership on social justice research and conversations around food systems. Course offerings and student success in food systems increase every year. Our public events, book talks, expert lectures, and career panels provide students immediate access to some of the top thinkers and practitioners in the field from around the world.

6 Berkeley by the Numbers (April 2021)
Breaking Barriers to Data

**Groundbreaking Research**
Along with our affiliated faculty, BFI works to disseminate peer-reviewed research and other products like films, op-eds, and books by Berkeley scholars working in food systems. From 2017-20, BFI affiliated faculty produced approximately 1102 publications, which BFI helped to amplify and translate, informing public debate. Public events are a key way we share new research, and bring the world’s experts to our students and the public. Some recent topics and notable speakers include:

- Dr. Charisma Acey on “Growing the Agroecological City”
- Dr. Tim Bowles on “Healthy Soil for a Productive and Sustainable California”
- Dr. Hilary Hoynes on “Safety Net Investments in Children: The Evidence on SNAP/Cal-Fresh”
- Dr. Mario Sifuentez on “Food, Water, and Labor in the Central Valley: Farmworkers and the Westlands”

**Fighting Falsehoods with Facts**
Just at a time when citizens and consumers want to understand food systems more, they are being fed disinformation, spread via traditional and new media at alarming rates. This means that peer-reviewed research can be even more easily manipulated, misunderstood, or ignored.

BFI embraces the opportunity to counter deceit on climate change, sustainability, and other food systems issues with facts.

BFI’s Takeout the Vote campaign engaged customers, delivery workers, and restaurant staff at restaurants in seven states including California, Georgia, Florida, New Mexico, New York, Pennsylvania, and Washington.
Pivoting Amid the Pandemic

This work continues through the COVID-19 pandemic. BFI co-hosted a December 2020 event featuring the work of Berkeley School of Public Health faculty Brenda Eskenazi and her team on the inequitable effects of the virus’ spread among farmworkers, reaching thousands of people through both our webcast event and coverage in media outlets like The Guardian. BFI also hosted Daffodil Altan and Andrés Cediel, filmmakers behind the PBS FRONTLINE documentary “COVID’s Hidden Toll.” This event, co-hosted by Assemblymember Robert Rivas, was widely attended by policymakers in Sacramento, who learned about the working and living conditions for farmworkers amid the pandemic.

Before, during, and after the present pandemic, BFI continues to demonstrate its dedication to timely and groundbreaking research that reaches everyone from the people who put food on your table to the policymakers who regulate how that work is performed.

“Being in the company of others who live a life of service was inspiring and invigorating. NO ONE should ever go hungry!... the work of BFI is uplifting will help get us there.”

— Renia Webb
Oakland parent advocate
Faculty Leadership

2017–20
Kristine Madsen
Faculty Director, Associate Professor, School of Public Health

2021–23
Charisma S. Acey
Faculty Director, Associate Professor, City and Regional Planning

2021–23
Timothy Bowles
Co-Associate Faculty Director, Assistant Professor, Environmental Systems, Policy, and Management

2021–23
Susana Matias
Co-Associate Faculty Director, Cooperative Extension Specialist, Nutritional Sciences and Toxicology
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Founding Executive Director, Berkeley Food Institute

Jen Upson,
Garden Educator
Community Partners

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California Association of Food Banks
California Certified Organic Farmers
California Department of Food and Agriculture
California Farmer Justice Collaborative
California Food and Farming Network
California Institute for Rural Studies
California Rural Legal Assistance
Carman Ranch
Center for Ecoliteracy
Community Alliance with Family Farmers
Edible Schoolyard Project
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State Innovation Exchange
Sugar Freedom Project
UC Agriculture and Natural Resources
UC Davis Department of Human Ecology
UC Sustainable Agriculture Research & Education Program
UC San Francisco Department of Nutrition and Food Services
UC Santa Cruz Center for Agroecology and Sustainable Food Systems
United Farm Workers
United Food and Commercial Workers, Local 5
Urban Tilth
WeSolve
Vote.org

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Goldman School of Public Policy
Graduate School of Journalism
Rausser College of Natural Resources
School of Public Health

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