J-WAFS project develops food preservation system

Jeffrey Grossman and Evelyn Wang created a technology that uses radiative cooling and no electricity to reduce food loss from spoilage.

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J-WAFS spinout company turns agricultural waste into clean-burning fuel

Kevin Kung’s Takachar technology emerged from a class project and was inspired by his first-hand experience during a trip to Kenya.

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MIT workshop explores nature-based solutions for climate change

The MIT Joint Program co-led event explored sustainable pathways to transform agriculture, forestry and other land uses into net carbon sinks.

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Patrick Doyle wins 2022 AIChE award

The J-WAFS PI won the American Institute of Chemical Engineers Alpha Chi Sigma Award for his highly encoded

Olfactory neuron helps guide food-seeking behavior

A new MIT study conducted in worms shows how sources of state and sensory
microparticles and advanced materials that can be used for water treatment.

information converge to control food behavior.

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**J-PAL working paper on farm input subsidies**

The paper evaluates a unique policy experiment in which the Malawi government randomized beneficiary selection for its Farm Input Subsidy Program.

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**MIT seeks to eliminate campus carbon emissions**

MIT’s Climate Action Plan aims to reduce carbon emissions on campus by setting impact goals including those for water, waste, and food systems.

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**Underwater camera tracks health of fish**

J-WAFS PI Fadel Adib & his team developed a camera to monitor the impacts of climate change underwater.

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**J-WAFS researchers analyze food security, climate change, & trade**

Greg Sixt and Ken Strzepek use models to project climate change impacts on food production, demand, and trade.

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**FACT Alliance paper examines food systems**

The J-WAFS-led Food and Climate Systems Transformation (FACT) Alliance present a new convergent science model for tackling systemic vulnerabilities in the current food systems.
The J-WAFS-led FACT Alliance hosts workshop on the future of food security

Climate change and global food systems are interacting in ways that are driving political and economic instability and threatening the future of food security. While important food systems research is taking place at universities and other institutions, much of it does not find its way into the hands of decision makers and stakeholders. To strengthen the linkages between science and action, the J-WAFS-led Food and Climate Systems Transformation (FACT) Alliance recently hosted a workshop called “Strengthening Science-to-Action Collaboration for Food Systems Transformation in an Uncertain Climate.” The workshop took place from September 27-29, 2022.

Approximately 70 attendees from over 40 global organizations traveled to Cambridge, Massachusetts for the workshop. Participants and speakers included researchers, stakeholders, policymakers, and other professionals working in food systems, agriculture, and nutrition. Their organizations spanned academia, government, non-profits, NGOs, farmers’ organizations, intergovernmental agencies, and the private sector. Importantly, representatives from the Global South participated as speakers and panelists, adding a critical voice to the conversation.

The many informative presentations and breakout discussions addressed the climate change-driven problems currently facing food systems and offered strategies for solutions. Outcomes from the workshop will lay the framework for the FACT Alliance to conduct collaborative, transdisciplinary, action-orientated research for improving food systems worldwide.
J-WAFS Grand Ethiopian Renaissance Dam (GERD) Lectures
**Wednesdays, Oct 12, Nov 16, & Feb 15, 4 - 5 p.m. ET, In-person**
J-WAFS visiting scholar Dale Whittington will give three lectures on the GERD that are open to the MIT, Harvard, and Tufts communities. [MORE INFO](#)

MIT Technology Review’s ClimateTech
**Wed-Thu, October 12-13, 2022, All day, In-person and online**
The conference will explore solutions for climate change, including how to make agriculture and food production processes more sustainable. [MORE INFO](#)

Promoting Sustainable Development for Africa
**Friday, October 14, 2022, 9:00 a.m. - 12:00 p.m. ET, In-person**
J-WAFS PIs present w Mostafa Terrab of OCP Group, a crop nutrition leader. Hosted by the Université Mohammed VI Polytechnique-MIT Research Program. [MORE INFO](#)

J-WAFS World Food Day Student Video Festival
**Friday, October 14, 2022, 12:00 – 12:30 p.m. ET, Online**
Join us for a video festival to honor the winning videos from the J-WAFS Student Video Competition: MIT Research for a Food Secure Future. [MORE INFO](#)

MCSC Annual Symposium
**Tuesday, October 18, 2022, 9:00 a.m. - 6:00 p.m. ET, In-person**
The MIT Climate & Sustainability Consortium will host panels of key academic and industry experts who’ll discuss the topics of climate & sustainability. [MORE INFO](#)

Campus Climate Action Event (MIT ONLY)
**Tuesday, October 25, 2022, 11:00 a.m. - 1:00 p.m. ET, In-person**
Stop by the Kendall/MIT Open Space to learn about MIT’s campus climate action plan, which includes water & food impact goals. [MORE INFO](#)
**MIT City Science Summit**
**Thur-Fri, October 27 - 28, 2022, All day, In-person, Invite-only**
The event will highlight research that addresses issues like food scarcity. Email the City Science Network to inquire about invitations. [MORE INFO]

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**FUNDING**
**AND OTHER OPPORTUNITIES**

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**MIT Water Club Involvement**

**Deadline:** Ongoing
**Open to:** MIT students
The MIT Water Innovation Prize is recruiting a team to help emerging entrepreneurs translate research into businesses, access mentors, & build networks in the water industry.

[MORE INFO]

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**MIT's ESI Fellowship**

**Deadline:** Ongoing
**Open to:** MIT faculty
This program from the Environmental Solutions Initiative encourages cross-disciplinary collaboration to embed climate science, environment, & sustainability into the undergrad curriculum.

[MORE INFO]

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**MIT Sloan Latin America Office Seed Funds**

**Deadline:** October 29, 2022
**Open to:** MIT faculty or full-time researchers
Promotes long-term collaboration between MIT and Latin America for research projects including those in water or food.

[MORE INFO]

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**MISTI Faculty Seed Funds**

**Deadline:** December 13, 2022
**Open to:** MIT principal investigators
Regional funds to support collaborations between MIT faculty and research scientists and their counterparts abroad, to work on innovative projects including those in water and food.

[MORE INFO]
World Food Day on October 16

Stay tuned for a special edition of our newsletter on 10/16 for World Food Day, which will include videos from MIT students who took part in our competition and festival to highlight food and ag research projects at MIT.

Bruce Crawford on the Modern CTO podcast

The CEO of J-WAFS spinout company Nona Desalination explains the challenges of turning saltwater into drinking water at scale.

LISTEN NOW

INTERESTED IN SUPPORTING J-WAFS?

When you make a gift, you are making an investment in both the future of J-WAFS and our Institute-wide work to improve the productivity, accessibility, and sustainability of the world’s water and food systems.
J-WAFS is an Institute-wide effort that brings MIT’s unique strengths to bear on the many challenges our food and water systems face.

Our program catalyzes MIT research, innovation, and technology for ensuring safe and resilient supplies of water and food while reducing environmental impact, to meet the local and global needs of a rapidly expanding and evolving population on a changing planet.

"Stakeholder engagement is absolutely essential throughout the entire [agricultural] assessment process so change can actually happen."

--Cynthia Rosenzweig, PhD, senior research scientist at the NASA Goddard Institute for Space Studies, during last week’s FACT Alliance workshop