Researchers from the J-WAFS-led FACT Alliance publish op-ed, J-WAFS PIs named winners in MIT's Climate Grand Challenges, Earth Day events, and more!





NEWS & ANNOUNCEMENTS



Winners of MIT Climate Grand Challenges include many J-WAFS PIs

J-WAFS PIs are found on all five winning teams, working on projects including low-carbon agriculture solutions.

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J-WAFS PI publishes in Science Advances

The J-WAFS-funded research from Kripa Varanasi & team explores their technology that enhances agricultural spray retention on plant surfaces.

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J-WAFS research noted in Alliance Magazine

Community Jameel's Uzma Sulaiman cites a J-WAFS project that shows the Middle East is vulnerable to food insecurity due to climate change.

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Ariel Furst improves agriculture with chemical engineering

The J-WAFS PI created a coating for microbes in soil to protect them from

harmful fertilizers.

WATCH NOW



Gehring Lab tackles food insecurity through plant biology

J-WAFS PI Mary Gehring studies plant epigenetics to find new ways to grow climate-resilient crops.

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J-WAFS PI works to decarbonize energy systems

Yogesh Surendranath uses water & electricity from batteries to design catalysts for sustainable fuels.

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J-WAFS PI's work extends to challenges in medicine & engineering

Xuanhe Zhao uses hydrogels—polymers that can absorb large volumes of water while retaining their shape—to make life-saving devices.

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MIT Sloan alumni found food and agriculture startups

A 2021 report from the MIT Sloan Sustainability Initiative features a startup that diverts food waste from landfills, among others.

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Fadel Adib wins ACM SIGMOBILE Rockstar Award

The professor was recognized for his innovations in wireless sensing, like those used in a J-WAFS-funded project to sense water & food contaminants.

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IN-DEPTH LOOK

RECOGNIZING THE URGENT NEED FOR FOOD SYSTEMS TRANSFORMATION THIS EARTH DAY

Researchers from the J-WAFS-led FACT Alliance publish op-ed in IAF

April 22 marks Earth Day, an annual event celebrated since 1970 that brings attention to environmental issues and aims to spur action to better protect the planet from threats like climate change. One area that is particularly tied to and affected by climate change is food.

Agriculture and food production systems are increasingly at risk from weather and environmental changes driven by the climate crisis, yet intensive farming practices, deforestation, supply chains, and food waste all contribute to climate change. In the March 2022 edition of International Affairs Forum (IAF), researchers from the J-WAFS-led FACT Alliance published an op-ed highlighting the urgent need to make food systems more sustainable in light of climate change.



Greg Sixt, the Research Manager for Climate and Food Systems at J-WAFS, and Peter Smith, a professor at the University of Aberdeen, suggest a new approach is needed in order to drive food systems change. Their oped "Why We Must Connect Research to Action to Solve Critical Food Systems and Climate Challenges" recommends the use of convergence research, which integrates expertise across the research community, policy makers, and other

stakeholders, to facilitate change in food and climate. The J-WAFS-led

Food and Climate Systems Transformation (FACT) Alliance, a global consortium of 16 leading research institutions spanning six continents, is noted as one such effort that is using convergence research on food and climate systems for better problem formulation and greater participation by stakeholders.

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EVENTS WATER AND FOOD



MIT Climate Grand Challenges Showcase Event Thursday, April 21, 2022, 10:00 a.m. - Noon, In-person and Online Join MIT president, L. Rafael Reif, and special presidential envoy for climate, John Kerry, as multiple J-WAFS PIs present their winning projects. <u>MORE INFO</u>



Earth Day 2022 Friday, April 22, 2022, All day, Online

This Earth Day visit J-WAFS' <u>Twitter</u> & <u>Instagram</u> channels to test your knowledge of J-WAFS-funded environmental research by participating in fun quizzes and polls!



Presentation on Urban Farming (MIT ONLY) Friday, April 22, 2022, 10:00 - 11:00 a.m. ET, In-person

A presentation and discussion on the environmental and social impacts of urban farming and gardening projects, sponsored by MIT Anthropology. <u>MORE INFO</u>



Harvard Discussion on Regenerative Agriculture Friday, April 22, 2022, 12:00 p.m. ET, Online

Regenerative agriculture can create a more sustainable, nourishing, & resilient food system. Learn more at this event. <u>MORE INFO</u>



MIT Water Innovation Prize: Final Pitch Event Monday, April 25, 2022, 5:00 - 8:30 p.m. ET, In-person and Online

The MIT Water Club, supported by J-WAFS, will award winning teams who have technologies in water innovation, infrastructure, or management. <u>MORE INFO</u>



Rabobank-MIT Food & Agribusiness Innovation Prize Event Wednesday, April 27, 2022, 6:00 - 8:30 p.m. ET, Online

Co-sponsored by J-WAFS, the Rabobank-MIT Food & Agribusiness Prize will award teams with startups that improve food systems. <u>MORE INFO</u>



Lecture on the Quabbin Reservoir Project Wednesday, May 11, 2022, 4:00 - 5:00 p.m. ET, In-person

Join J-WAFS PI Andrew Whittle and author Elisabeth C. Rosenberg to learn how the Quabbin conflict relates to climate change, water rights, & more, at this event sponsored by MIT's Department of Civil and Environmental Engineering. <u>MORE INFO</u>

FUNDING

AND OTHER OPPORTUNITIES

J-WAFS Grant for Transforming Animal Agriculture Systems

Deadline: April 27, 2022

Open to: MIT faculty, research staff, and students

Grants in the range of \$15-25K will be awarded to selected recipients with projects addressing issues in animal agriculture.

J-WAFS Travel Grant for Water Conferences

Deadline: May 16, 2022

Open to: MIT graduate students

Selected students with research in the water sector will receive conference registration and travel funding to attend Stockholm World Water Week, taking place August 23 - September 1, 2022.

MORE INFO

MORE INFO

Dean A. Horn Award for Undergraduate Study in Marine Research

Deadline: May 1, 2022

Open to: MIT undergraduates

MIT undergrads with marine research projects, including those related to seafood or submarine groundwater, are eligible to apply.

J-WAFS Water and Food Grand Challenge Grant

2022 Request for Statements of Interest to be announced shortly

Open to: MIT researchers

Check the J-WAFS site next month for a new funding opportunity to address a significant "Grand Challenge" in water and/or food. Up to \$1.5M will be

CHECK HERE IN MAY

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.

DONATE ONLINE

FOR MORE INFORMATION ABOUT SPONSORSHIP OPPORTUNITIES, CONTACT:

RENEE J. ROBINS Executive Director, J-WAFS <u>rrobins@mit.edu</u> or (617) 324-6726



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.



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