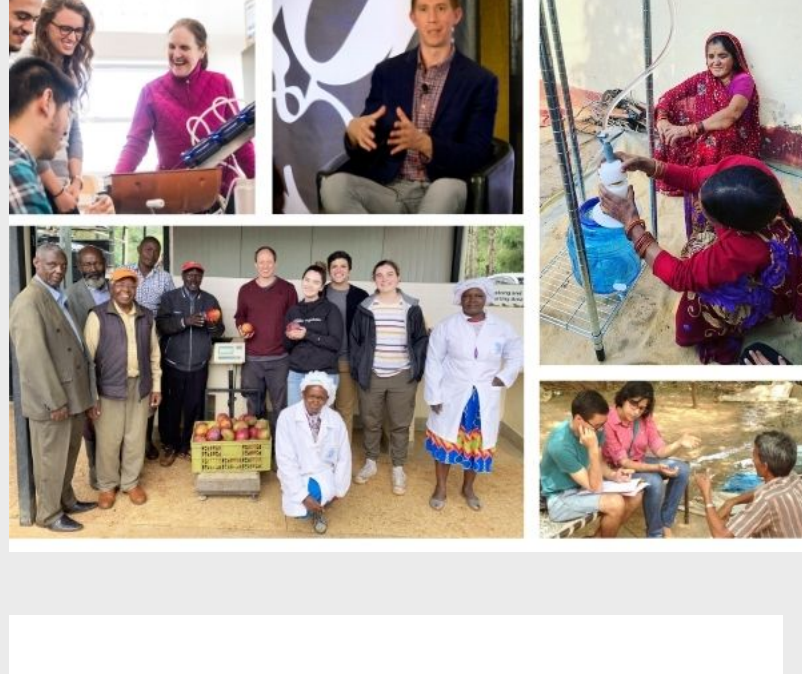


## NEWS & ANNOUNCEMENTS



### I&E network at MIT advances J-WAFS projects

MIT's innovation and entrepreneurship ecosystem helps launch water and food startups with social and economic benefits.

[READ MORE](#)

### J-PAL research explores ways to help farmers

Improved agricultural technologies, financial services, and social assistance programs can enhance the resilience of small-scale farmers facing climate shocks.

[READ MORE](#)

### Sloan alum pursues sustainable coffee pod

Neha Thatte Mallik, MBA '16 leads an initiative at Keurig Dr Pepper to develop a plastic-free coffee pod that enhances both sustainability and flavor of the coffee.

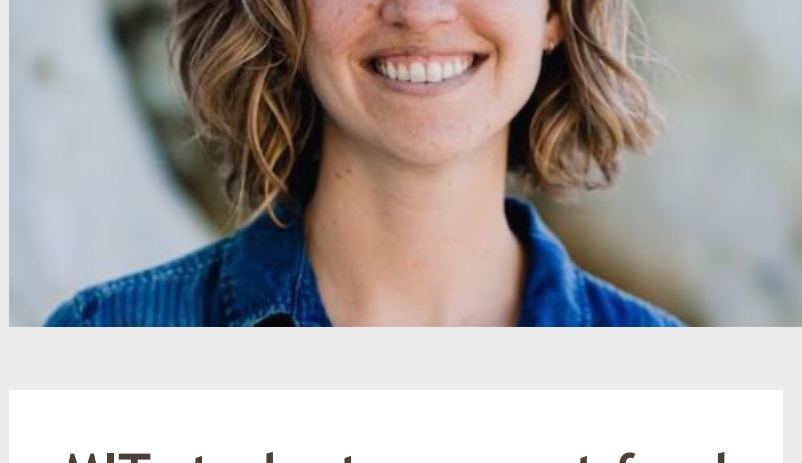
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### J-WAFS Fellow improves desalination

Jon Besette worked with J-WAFS PI Amos Winter on a solar-powered desalination system that can provide communities with safe drinking water.

[READ MORE](#)



### J-WAFS PI interviewed by MIT ILP

The Industrial Liaison Program spoke with Sara Beery about how she uses machine learning and AI to improve ecosystems and biodiversity.

[LEARN MORE](#)

### MIT students present food and ag startups

At Demo Day, the capstone event for MIT delta v's student venture accelerator, innovations included ways to minimize restaurant waste and improve the agriculture industry.

[READ MORE](#)

### MIT Climate Project hosts kick-off event

Several J-WAFS community members have been named mission directors who will lead interdisciplinary teams to identify gaps in the global climate response that MIT can help fill.

[READ MORE](#)



### J-WAFS PI and MIT Pres. talk water and food

Benedetto Marelli discusses his research on silk-based coatings used in agriculture and water filtration with Pres. Sally Kornbluth.

[LISTEN NOW](#)

## FUNDING AND OTHER OPPORTUNITIES

### J-WAFS Grant for Water and Food Projects in India

**Open to:** MIT faculty, research staff, students  
**Deadline:** October 31, 2024

Applicants may request up to \$15,000 in funding for projects that address a water or food-related challenge in India.

[MORE INFO](#)

### J-WAFS Seed Grant LOIs

**Open to:** MIT PIs  
**Deadline:** December 9, 2024  
 Grants for early-stage MIT research in areas related to water and food security, safety, and sustainability for human need. **Must submit a letter of interest, after which full proposals will be welcome by invitation based on review of the LOIs.**

[MORE INFO](#)

### MIT ESI Journalism Fellowship

**Open to:** U.S. Journalists  
**Deadline:** October 14, 2024

The MIT Environmental Solutions Journalism Fellowship supports journalists who cover how climate change impacts their local community and region, including impacts to water and food systems.

[MORE INFO](#)

### MIT Energy and Climate Hackathon

**Open to:** Students over 18  
**Deadline:** October 18, 2024

Apply to earn a spot at this event, November 15-17, where students will come to MIT for three days to hack solutions to problem including ones in renewable energy, transportation and mobility, and circularity.

[MORE INFO](#)

### Ideas workshop for MIT MAD and HPI

**Open to:** MIT researchers  
**Deadline:** October 20, 2024

Apply to present your research remotely at a workshop on Nov. 18-19 to identify project ideas for MIT Morningside Academy for Design and the Hasso Plattner Institute's "Designing for Sustainability" grant.

[MORE INFO](#)

### MIT's IDEAS Social Innovation Challenge

**Open to:** MIT students  
**Deadline:** November 25, 2024

MIT's PKG Public Service Center invites MIT student-led teams to apply to this challenge to address social and environmental challenges, including those related to issues in water or food systems.

[MORE INFO](#)

### Notetakers & facilitators for UN workshops

**Open to:** MIT community  
**Deadline:** October 31, 2024

MIT Solve is supporting 5 consultations for the United Nations Environment Programme's **Global Environmental Data Strategy**. Notetakers and facilitators will receive training.

[MORE INFO](#)

### NEWEA Annual Conference and Exhibit

**Open to:** Emerging water businesses  
**Deadline:** December 6, 2024

Up to 12 companies will be selected to showcase their innovations at New England Water Environment Association's Water Innovation Day in Boston from January 26-29, 2025.

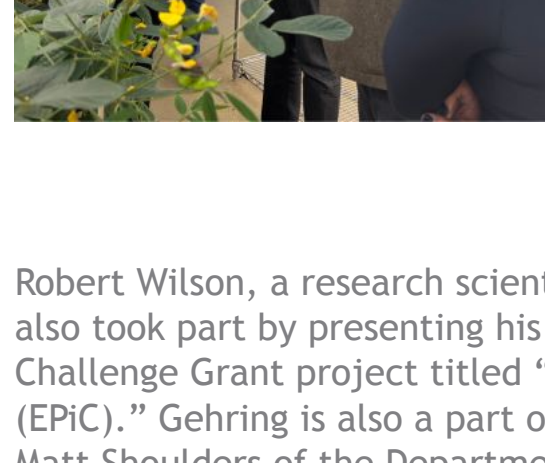
[MORE INFO](#)

## IN-DEPTH LOOK

COMMUNITY JAMEEL VISITS MIT AND MEETS WITH J-WAFS RESEARCHERS

### Colleagues from Community Jameel take a lab tour and learn about J-WAFS projects

On September 26th, 2024, members of Community Jameel, including director George Richards, visited MIT campus and toured the lab of J-WAFS PI and Professor Mary Gehring of the Department of Biology and the Whitehead Institute.



Gehring's lab is working on a J-WAFS Seed Grant project, titled "A new approach to enhance genetic diversity to improve crop breeding." Pigeon pea (*Cajanus cajan*), a key crop in many regions already facing food insecurity and predicted to be negatively impacted by climate change, is high in protein and drought resistant. Gehring's research seeks to improve the crop's resistance to various climate change stresses by stimulating increases in its genetic diversity.

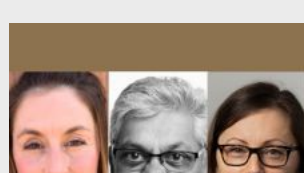
Robert Wilson, a research scientist in MIT's Department of Chemistry, also took part by presenting his work on the 2023 J-WAFS Grand Challenge Grant project titled "Enhanced photosynthesis in crops (EPI-C)." Gehring is also a part of this project, which is led by Professor Matt Shoulers of the Department of Chemistry. The team aims to build a better, more efficient Rubisco enzyme, which is responsible for fixing CO2 in plants during photosynthesis. Since Rubisco is a very slow-acting enzyme, the researchers are using molecular biology and machine learning to identify, predict, install, and screen improvements to Rubisco's kinetic activity.

[READ MORE](#)

## EVENTS



**World Food Day**  
**Wednesday, October 16, All-day, Online**  
 A day to commemorate the founding of the United Nations Food and Agriculture Organization in 1945. This year's theme explores foods for a better life and future. Stay tuned for a special edition of the J-WAFS newsletter. [MORE INFO](#)



**Fall 2024 seminars with J-WAFS visiting scholars**  
**Oct 16, Nov 7, & Nov 14, \*Click below for updated times, In-person**  
 Chandni Madanmooz of McGill Univ., Joanne Tingoy-Helyeah of the University of South Australia, and Neda Trifkovic of the University of Copenhagen present in this seminar series on climate and agricultural adaptation and mitigation. [MORE INFO](#)



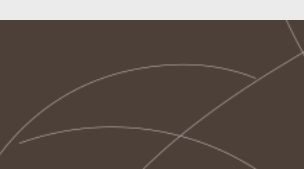
**2024 Norman E. Borlaug International Dialogue**  
**Tue, Oct 29 - Thur, Oct 31, All day, In-person in Iowa and online**

J-WAFS researcher Prof. Kenneth Strzepek will introduce the Jameel Index and Greg Sixt, director of the J-WAFS-led FACT Alliance will facilitate a panel further exploring the Index's value in building food trade resilience. [MORE INFO](#)



**Webinars on climate change impacts to land, water, & food**  
**Oct 31, Nov 21, and Dec 12, 9:00 - 10:00 a.m. ET, Online**

Attend three virtual seminars on how climate change impacts water and food security. Co-hosted by the J-WAFS-led FACT Alliance and the University of Natural Resources and Life Sciences, Vienna (BOKU). [MORE INFO](#)



**MIT ILP webinar on decarbonization**  
**Thursday, November 7, 11:00 a.m. - 12:40 p.m. ET, Online**

J-WAFS PI Jennifer Morris will be one of two guest speakers at this MIT Industrial Liaison Program webinar on decarbonization strategies for corporations. Morris will discuss land-based carbon dioxide removal and emissions trading. [MORE INFO](#)

## PUBLICATIONS

### Study on regulation of India's rice exports

J-WAFS researchers Ken Strzepek, Greg Sixt, and others used the global simulation model to analyze bilateral trade welfare impacts of India's export ban of non-basmati rice.

[READ MORE](#)

### MIT alum develops irrigation tools

Georgia Van de Zande, a former student in the J-WAFS community, developed a precision irrigation tool that brings water efficiency to resource-constrained farmers.

[READ MORE](#)

### J-WAFS PI studies shrimp aquaculture

Otto Cordero's preprint paper focuses on microbiome determinants of productivity for whiteleg shrimp—one of the most predominant animal species in global aquaculture.

[READ MORE](#)

### J-WAFS students discuss U.S. wastewater

Arjav Shah and Devashish Gokhale say current micropollutant treatments are inadequate in this MIT Science Policy Review article on industrial wastewater technologies and policies.

[READ MORE](#)

## AWARDS & RECOGNITIONS

### J-WAFS participates in Climate Week

Renee Robins, J-WAFS executive director, and Greg Sixt, director of the J-WAFS-led Food and Climate Systems Transformation (FACT) Alliance, spoke at side-events outside of the 79th Session of the UN General Assembly and Climate Week in New York City this September.

[LEARN MORE](#)

### MIT postdoc awarded USDA fellowship

Meng Li, a postdoc in the lab of J-WAFS PI Benedetto Marelli, received a fellowship from the USDA's National Institute of Food and Agriculture to further work on a J-WAFS Seed Grant project that aims to develop microneedle technology for underwater fish vaccine delivery.

[LEARN MORE](#)

### Mrin Penumaka

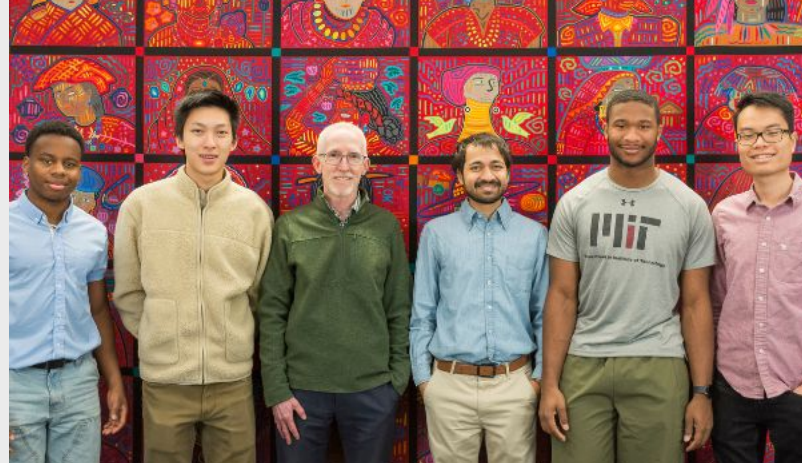
2024 J-WAFS Travel Grantee



### Mrin Penumaka receives J-WAFS travel grant

The PhD student in Urban Studies and Planning will attend the UNC Water and Health Conference to inform her work on South Africa's water & energy needs.

[READ MORE](#)



### J-WAFS team wins big at Cleantech Open

Pat Doyle's J-WAFS-funded hydrogel system for water and food purification won two awards in the Northeast Regional Finals.

[LEARN MORE](#)

## 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.

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FOR MORE INFORMATION ABOUT SPONSORSHIP OPPORTUNITIES, CONTACT:

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[rrobins@mit.edu](mailto:rrobins@mit.edu) 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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