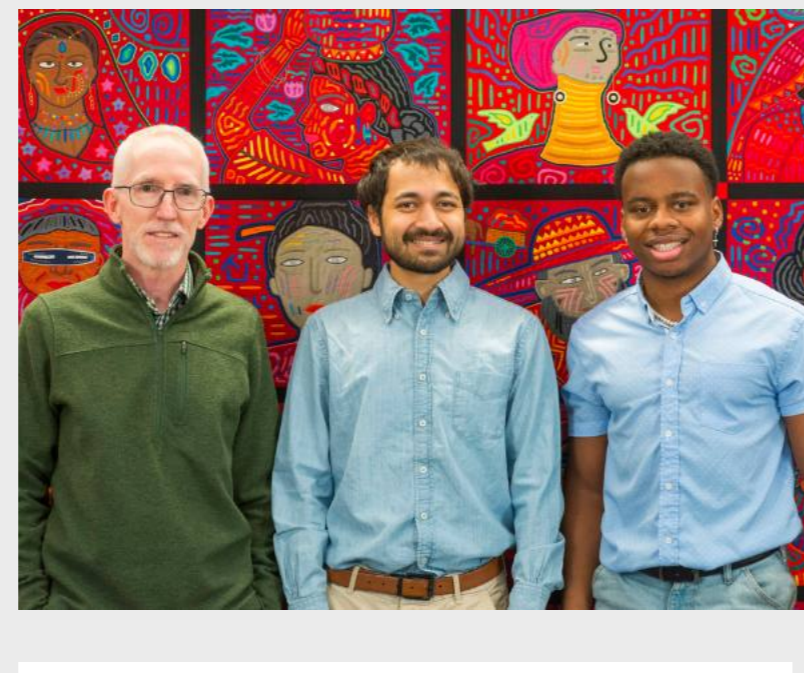


## NEWS & ANNOUNCEMENTS



### J-WAFS team creates water treatment system

Patrick Doyle and his lab developed a technology to quickly and sustainably remove micropollutants from water.

[READ MORE](#)

### J-WAFS PI Taylor Perron speaks at MIT WORLDING

WORLDING, which explores climate futures through multimedia, selected five teams, including one addressing Mexico City's water crisis, to meet with MIT scholars like Perron, who researches how geology, climate, and life shape Earth's surfaces.

[READ MORE](#)

### MIT students prototype water and food products

As part of the Department of Mechanical Engineering's Product Engineering Processes course, students developed products like an automated water bottle cleaner and an automated fish food dispensing system for commercial fish farmers.

[READ MORE](#)



### MIT study on "food as medicine"

A new study from the Jameel Poverty Action Lab and others, examines diet-based treatments for Type 2 diabetes.

[READ MORE](#)

### MIT alum designs indoor garden

Randall Briggs '09, SM '18 created GardenByte, an indoor herb garden, which allows plants to grow three times faster than outdoors by using hydroponics, integrated sensors and powerful LEDs.

[READ MORE](#)

### J-WAFS PI co-authors a paper on biodiversity

Sara Beery and fellow researchers emphasize the use of advanced technology to collect high-resolution biodiversity data to enable scientific inquiry, conservation, and policy decisions.

[READ MORE](#)



### J-WAFS PI's talk honors late MIT Prof. Dresselhaus

Angela Belcher showcased how biology and nanotechnology can be used for environmental advancements like cleaning up rivers.

[READ MORE](#)

## FUNDING AND OTHER OPPORTUNITIES

### J-WAFS Fellowships for Water & Food Solutions

**Open to:** MIT PhD students  
**Deadline:** March 1, 2024  
 MIT faculty are invited to nominate PhD students with water or food-related research for human need for this fellowship that covers one semester of academic funding.

[MORE INFO](#)

### Job opening with J-WAFS spinout company

**Open to:** Electrolysis engineers  
**Deadline:** Ongoing  
 Desalination company NONA Technologies seeks an individual to work on a pilot-scale module for brackish water and wastewater treatment.

[MORE INFO](#)

### MIT Sandbox Innovation Fund

**Open to:** MIT students  
**Deadline:** January 16, 2024  
 This program provides funding and mentorship to MIT student entrepreneurs who have startup ideas or innovations, including those related to the water or food sectors.

[MORE INFO](#)

### Future Energy Systems Center

**Open to:** MIT PIs  
**Deadline:** February 7, 2024  
 The MIT Energy Initiative seeks projects that address challenges in decarbonizing the global economy, including in industries like agriculture. Funding from \$100-250K.

[MORE INFO](#)

## IN-DEPTH LOOK

FORMER STUDENT OF J-WAFS DIRECTOR MAKES STRIDES IN DESALINATION

### Harmony Desalting takes home recent awards from around the globe

During the summer of 2017, Quantum Wei BA '15, SM '17, PhD '21 started working on batch reverse osmosis technology in the lab of John H. Lienhard V, director of J-WAFS and MIT professor in the Department of Mechanical Engineering. Batch reverse osmosis refers to a desalination process in which water is treated in batches (as opposed to continuously) by pushing salty water against a membrane, forcing freshwater through.



Wei worked with others in the lab to create a technology that reduces energy use by 10% compared to conventional reverse osmosis (RO). The batch process allows for improved water recovery and operational productivity without sacrificing membrane longevity. In 2020, Wei co-founded Harmony Desalting to bring the technology to market and to make desalination more affordable and sustainable.

The company has gone on to win several awards, including \$2M as part of a team in Canada's Department of National Defence's Innovation for Defence Excellence and Security (IDEaS) Pop up city Contest. Harmony also received the award for "Most Promising Technology in Reducing Chemicals & Consumables" as part of the Global Prize for Innovation in Desalination in Jeddah, Saudi Arabia.

[READ MORE](#)

## EVENTS



**Webinar on food security in the Horn of Africa** (OPEN TO ALL)  
**January 16, 2024, 9:00 a.m. ET, Online**  
 The University of Natural Resources and Life Sciences, Vienna, a member of the JWAFS-led FACT Alliance, will host a webinar on climate change impacts on food production and livelihoods in the Horn of Africa. [MORE INFO](#)



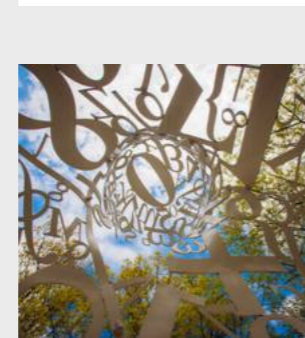
**MIT water reuse workshop** (MIT ONLY)  
**Tuesday, January 16, 10:00 a.m. - Noon ET, 26-033**  
 MIT's Huang-Hobbs BioMaker Space will host this Independent Activities Period (IAP) workshop for the MIT community to explore unit operations of wastewater and water treatment and related topics in a hands-on wet lab. [MORE INFO](#)



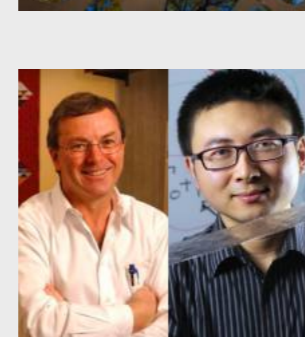
**J-WAFS ice cream social for MIT students** (MIT ONLY)  
**Thursday, January 18, 2024, 3:30-5:00 p.m. ET, RSVP for location**  
 Are you an MIT student with a passion for water and food-related research for human need? Drop in to this informal event to network and engage with peers with similar water and food interests while enjoying a sweet treat! [MORE INFO](#)



**MITdesignX Climate Solutions IdeaThon** (MIT ONLY)  
**Tuesday-Thursday, January 23-25, 4:00-7:00 p.m. ET, N52 garage**  
 MIT student teams will work together over three days to brainstorm, make observations, collect data, and design tools to both identify and frame a specific climate problem, and then design a viable and feasible solution. [MORE INFO](#)



**Legal dos and don'ts of starting a startup** (MIT ONLY)  
**Monday, January 29, 2024, Noon - 1:30 p.m. ET, E38-345**  
 Increase your knowledge during this Independent Activities Period (IAP) course from MIT Deshpande Center, featuring expert insight into the legal issues to consider when you start a company, including one in water or food. [MORE INFO](#)



**MIT's Technology Licensing Office speaker series** (MIT ONLY)  
**Various dates from now until February 2, 2024, MIT campus**  
 The series includes talks from J-WAFS PIs like Alan Hatton who will discuss how MIT IP is fighting climate change and Xuanhe Zhao who will share his academic, research, and tech transfer journey. [MORE INFO](#)



**Lecture on the Grand Ethiopian Renaissance Dam (GERD)**  
**Wednesday, February 7, 2:30-4:00 p.m. ET, E38-346**  
 The MIT, Harvard, and Tufts communities are invited to join J-WAFS Visiting Scholar Dale Whittington for a seminar on the filling of the GERD reservoir and its implications for Egypt, Sudan, and Ethiopia. [MORE INFO](#)



**MIT Sustainability Connect 2024** (MIT ONLY)  
**Thursday, February 8, 8:45 a.m. - 2:30 p.m. ET, Samberg**  
 Attendees will get an inside look at the many climate and sustainability initiatives that exist at MIT, including MIT's Fast Forward Plan for Climate Action, from reimagining food systems to eliminating waste. [MORE INFO](#)

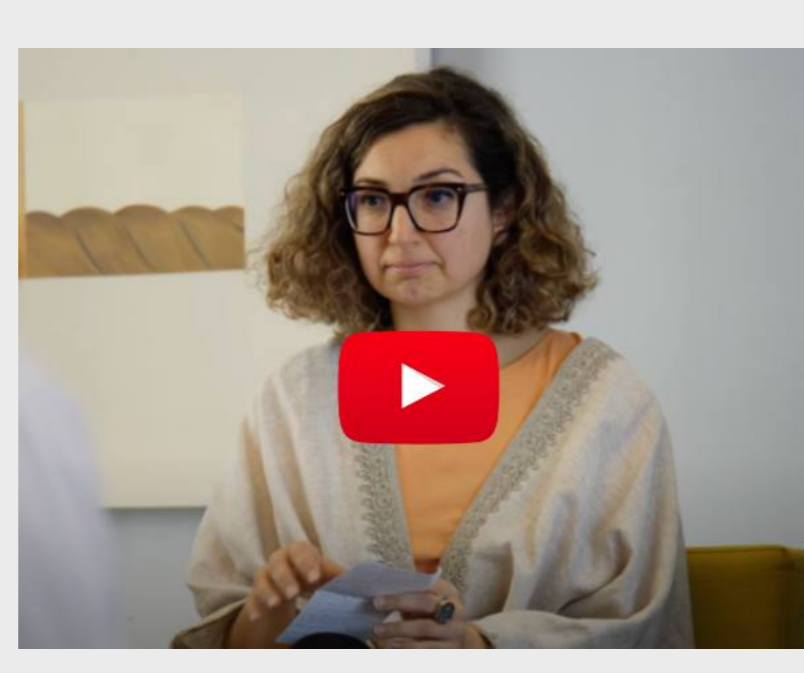
## IN CASE YOU MISSED IT



### J-WAFS PI works with students on water project

As part of MIT's DesignPlus learning community, D-Lab founding director Amy Smith helped students use solar disinfection for water treatment.

[SEE MORE](#)



### J-WAFS Fellow speaks on panel

MIT PhD student and former Rasikbhai L. Meswani Fellow Nadia Christidi was part of a Community Jameel event on the arts, health, and climate action.

[WATCH 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.

[DONATE ONLINE](#)

FOR MORE INFORMATION ABOUT SPONSORSHIP OPPORTUNITIES, CONTACT:

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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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