J-WAFS Abdul Latif Jameel Water & Food Systems Lab

Securing humankind's vital resources

IN THE NEWS

JANUARY 2020

Deadline Approaching for J-WAFS Seed Grants

MIT PIs can receive research funding of $75K/year for up to two-years, overhead free; deadline 1/16/20.

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Global Clean Water Desal Alliance on Decarbonization

J-WAFS' John Lienhard contributed to a communiqué at Madrid's COP25 that argues for accelerated R&D to advance desalination powered by renewables.

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New J-WAFS-funded MIT/IIT Ropar Research Projects in India

Announcing two newly-funded research projects that both focus on improving the sustainability and efficiency of smallholder farming practices in India.

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Creating Tiny Fibers for Clean Water and Renewable Energy

This profile of J-WAFS PI Julia Ortony describes how the nano materials developed in her lab purify water, remediate the environment, and make

Water, Food, and Energy Innovator Named Head of Materials Science & Engineering

Jeffrey Grossman, previously a J-WAFS Solutions grantee, will now head MIT's

fuel from sunlight.

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Department of Materials Science and Engineering.

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J-WAFS Welcomes New Visiting Scholar

Water management scholar Joanne Tingey-Holyoak joins J-WAFS from the University of Southern Australia.

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IN-DEPTH LOOK

J-WAFS SEED GRANTS

Making Real a Biotechnology Dream: Nitrogen-fixing Cereal Crops

Nitrogen is a key nutrient that enables plants to grow. Plants like legumes are able to provide their own through a symbiotic relationship with bacteria that are capable of fixing nitrogen from the air and putting it into the soil, which is then drawn up by the plants through their roots. Other types of crops—including major food crops such as corn, wheat, and rice—typically rely on added fertilizers for nitrogen, including manure, compost, and chemical fertilizers. Without these, the plants that grow are smaller and produce less grain.

The Voigt Lab, led by Christopher Voigt, the Daniel I.C. Wang Professor of Advanced Biotechnology at MIT, has worked for the past four years to apply biological engineering tools to develop cereal crops that can fix their own nitrogen. Supported by the J-WAFS seed grant program, and aided by close collaborations with a team of international experts, his research team has already engineered the first-ever plant with chloroplasts that possess a nitrogen-fixing genetic pathway. The results of his team's work could eventually replace cereal crops' need for nitrogen from chemical fertilizers. Find out more about the groundbreaking results the team has obtained, and how they are moving us closer to fertilizer-independence through nitrogen-fixing cereals.

READ MORE

EVENTS

FOOD & WATER

MIT Alumni Fireside Chat: Kevin Simon, Watts Water Tech

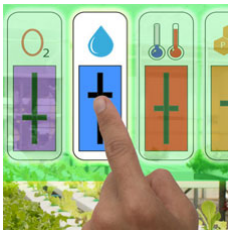
Jan. 16 / 5 PM / 2-105, MIT

Kevin Simon (MechE/MBA '18) will discuss his experience as a research engineer at Watts Water Technologies and share details about his career journey. MORE INFO

NEWEA Annual Conference: Inspiring the Water Revolution

Jan. 26-29 / Boston Marriott Copley Place, Boston, MA

The New England Water Environment Association will convene policy makers, researchers, and industry professionals at this water-focused event. MORE INFO



Decision Support Tools for Water Management in Agriculture

Feb. 18 / 11 AM / E51-275, MIT

J-WAFS visiting scholar Joanne Tingey-Holyoak will discuss how using farmers' financial, soil moisture, & climate data together helps water efficiency. MORE INFO

Managing Water Storage & Runoff Safely and Sustainably

Feb. 25 / 11 AM / E51-275, MIT

J-WAFS visiting scholar Joanne Tingey-Holyoak on how accounting-informed practices can manage agricultural runoff and help the environment. MORE INFO

MIT Climate Action Symposium: Deep Decarbonization

Feb. 25 / 5 - 8 PM / Wong Auditorium (E51), MIT

Explore pathways to scalable, affordable, low-carbon fuels and large-scale carbon capture and utilization with experts at and beyond MIT. MORE INFO

Creating a Tool for Global Dam Safety Management

Mar. 3 / 11 AM / E51-275, MIT Campus

J-WAFS visiting scholar Joanne Tingey-Holyoak on how legal, institutional, technical, & financial considerations can be used in for water regulation. MORE INFO

MIT Class: D-Lab: Water, Climate Change, and Health

Spring Semester / 12 - 3 PM / N51-350

Learn more about mitigation strategies for climate change, sanitation, and health in this MIT D-Lab class led by J-WAFS PI Susan Murcott. MORE INFO

FUNDING

AND OTHER OPPORTUNITIES

J-WAFS Seed Grant

Deadline: Jan, 16

(MIT Only)

This two-year grant provides funding for innovative water- and food systems research. Up to $150K available to MIT researchers with PI status.

MORE INFO

MIT Water Innovation Prize

Deadline: Jan. 10

(Open to All Students)

Submit water startup ideas to the MIT Water Club's international pitch competition. Up to $35K in prizes awarded.

MORE INFO

Rabobank-MIT Food and Agribusiness Innovation Prize

Deadline: Jan. 12

(Open to All Students)

MIT Water Hackathon

Rolling Deadline

(Open to All MIT Students)

Join the MIT Water Club's organizing committee for MIT's first water hackathon.

Submit your food and agriculture startup idea to the MIT Food and Ag Club's international pitch competition. Up to $30K in prizes awarded.

MORE INFO

MORE INFO

MIT Water Night

Deadline: Rolling Deadline

(Open to All MIT Students)

Join the MIT Water Club's organizing committee for MIT Water Night, an event that showcases water-related research and art and includes other public engagement opportunities.

MORE INFO

Food for Good Challenge

Deadline: Feb. 14

(Open to All)

Develop an innovative and concrete solution from field to fork to deliver sustainable and healthy food to everyone, everywhere. Up to EUR 2 million available.

MORE INFO

John A. Knauss Marine Policy Fellowship Program

Deadline: Feb. 21

(Open to All Students)

Apply for this graduate student fellowship focused on ocean, coastal, and Great Lakes resources and national policy decisionmaking.

MORE INFO

MIT Martin Family Fellowship for Sustainability

Deadline: Feb. 28

(Open to MIT Students)

MIT faculty: nominate one PhD student to become a Martin Family Fellow for 2020-2021. Two-semester fellowship available.

MORE INFO

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

MIT

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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