## February 2024



### **Global Futures: Now**



Despite being the shortest month of the year (even in a leap year), February saw the launch of several exciting new initiatives that exemplify the Julie Ann Wrigley Global Futures Laboratory's mission of designing solutions to the world's most pressing challenges.

The Circular Plastics Microfactory – an applied research project targeting social, economic, and environmental justice – held its opening ceremony with Phoenix Mayor Kate Gallego and a number of other dignitaries in attendance. Presenting an opportunity to repurpose plastic waste that is otherwise not recyclable into circular-use solutions, the Microfactory aims to reduce greenhouse gas emissions by eliminating global supply chains and transportation logistics by focusing production onsite. This initiative is the culmination of more than six years of research and development by transdisciplinary teams across ASU including hundreds of students and over 20 faculty members. Given the prevalence of plastic pollution globally, the Microfactory exemplifies a real-world solution imagined, designed and implemented to address a real-world problem.

Also this month, the First National Atmospheric Water Extraction Summit took place here at ASU's Tempe campus, convening water researchers, start-up entities, large companies, and other participants invested in atmospheric water harvesting. The purpose of the summit was to foster dialogue on atmospheric water extraction – a method that condenses water vapor that is a natural part of the air – as an emerging solution to global water-use challenges. The summit was hosted by the <u>Arizona Water Innovation Initiative</u>, a statewide project led by the Global Futures Laboratory in collaboration with the Ira A. Fulton Schools of Engineering.

Capping off the month, the Global Futures Laboratory, led by its College of Global Futures and Global Institute of Sustainability and Innovation, held a series of interactive sessions at the Walton Center for Planetary Health as part of ASU's annual Open Door event. Among many presentations and hands-on activities, the School of Sustainability introduced ANDI, the world's first indoor-outdoor thermal manikin, as well as MARTY, a mobile climate data gathering station. Faculty from the School of Ocean Futures introduced a card game about coral reef ecosystems. At the same time, the School of Complex Adaptive Systems showed examples of biomimicry via 3D printed models in action. Passports were stamped at each activity, incentivizing the public to not only explore the Walton Center but also learn about the ongoing work taking place at Global Futures.

Despite our current planetary challenges, it is because of programs and interactions like these that I remain hopeful that a future on a healthy, habitable

planet that we so often talk about stays within reach. Every day, I witness how our faculty, students and staff collaborate to make strides in innovative water technologies, renewable energy, environmental justice, and more. Clearly, there is a sense of momentum at the Julie Ann Wrigley Global Futures Laboratory made possible by the collective spirit of responsibility for and commitment to our mission of creating a future where all life can thrive on a healthy planet.

Peter Schlosser

Vice President and Vice Provost of Global Futures

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First-of-its-kind Circular Plastics Microfactory result of partnership between ASU, city of Phoenix, Goodwill of Central Arizona and Hustle PHX

The Circular Plastics Microfactory held its opening ceremony on Feb. 6. The microfactory will convert otherwise unrecyclable waste materials into new products, provide skilled job opportunities and create a cooperative business model in Phoenix. The Microfactory will sidestep the logistical steps that lead to substantial footprint issues while giving discarded plastic new life as a core material to make new products.

Learn more



### Research: A bumpy road ahead for genetic biocontainment

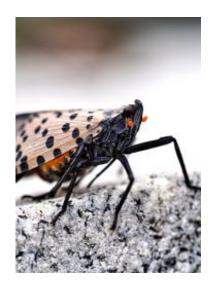
A paper published last month in Nature Communications discusses the practicality of the environmental release of bioengineered organisms. According to the article's authors, the translation of biocontainment to real-world deployment faces several challenges. Authors include ASU-affiliated Dalton George, Mark Danciu and <a href="Emma Frow">Emma Frow</a>, who holds a joint appointment with the School for the Future of Innovation in Society and the School of Biological & Health Systems Engineering.

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### Insect smuggling really bugs this Senior Global Futures Scholar

<u>Lauren Weidner</u>, a Senior Global Futures Scholar, recently spoke with 12News about her newly

acquired collection of more than 3,200 illegally trafficked insects at the Forensic Entomology and Wildlife Laboratory at ASU's West Valley Campus. Read the ASU News story about the collection <a href="here">here</a>. Weidner told 12News many of the samples come from southeast Asian countries like Indonesia, Laos and Malaysia, and others came from Canada and Mexico.



Read more



### Carola Grebitus featured in Scientific American

Carola Grebitus, a Senior Global Futures Scientist and a sociologist specializing in food choice at ASU, said urban farming is a powerful — yet imperfect — tool for education and job creation. The article discusses a study published in Nature Cities that compared carbon emissions from small farms and gardens in major cities across the U.S. and Europe with those of a typical industrial farm. The study found that the carbon cost of low-tech urban farms can be up to six times greater than that of industrial farming operations.

**Read more** 

### The role of the university in changing the world

In the first story in a series exploring our biggest environmental challenges, leaders across ASU discuss what universities can do to address complex global problems more successfully. These leaders include prominent ASU figures including Michael M. Crow, Sally C. Morton, Peter Schlosser, Gary Dirks and Sanjeev Khagram.



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# Senior Global Futures Scientists awarded 2024 AAG Media Achievement Award

In recognition of their contributions to the field of geographical research, Senior Global Futures Scientists David Hondula, Jenni Vanos, Ariane Middel, Patricia Solís and Melissa Guardaro have been awarded the 2024 AAG Media Achievement Award from the American Association of Geographers. This group, all affiliated with ASU's Knowledge Exchange for Resilience, used a variety of geographical methods to better understand extreme heat. Their efforts were widely amplified via high-profile media outlets to raise awareness of extreme heat outcomes.

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#### **ASU** summit calls for innovations

### in atmospheric water harvesting technology

As questions about water resources and access continue to build in the Southwest, some experts are turning to a new technology for solutions: atmospheric water harvesting, a method of water collection that draws water from humidity in the air. Experts with a focus in areas such as engineering, hydrology, material science and thermodynamics gathered at ASU this month for the Atmospheric Water Harvesting Summit — the first summit of its kind dedicated entirely to the rising technology.



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# New ASU podcast looks at biomimicry through an Indigenous lens

"Knowledge Symbiosis: Can Biomimicry and Indigenous Science Harmonize" is a five-episode podcast series recently produced by The Cultural Conservancy's Native Seed Pod in collaboration with ASU. The podcast is hosted by Sara El-Sayed, codirector of the Biomimicry Center and an assistant research professor at the Swette Center for Sustainable Food Systems; Melissa Nelson, professor of Indigenous sustainability in the School of Sustainability; and Lily Urmann, program coordinator for the Biomimicry Center. It is available on "The Native Seed Pod" and "Learning from Nature: The Biomimicry Podcast."

**Read more** 

#### ASU advances to develop a Quality Green Jobs Agenda for Arizona

The College of Global Futures has been selected among 10 local partners to advance in Jobs for the Future's regional challenge to develop training strategies for placing workers in quality green jobs. As a semifinalist, the College of Global Futures is developing a regional Quality Green Jobs Agenda that details strategies for training people and placing them in quality green jobs.



Learn more



### Global Futures and Southwest Sustainability Innovation Engine in The Arizona Republic, State Press

The Southwest Sustainability Innovation Engine partnership, led by Peter Schlosser at ASU, was featured by both the Arizona Republic and <u>The State Press</u>. "For me, this NSF program offered an opportunity to help fulfill our region's potential to become the national and international leader in technology, workforce, and policy-based climate resilience," said School of Sustainability professor

Read more

# Watts professor continues longtime efforts toward sustainable community development

Mark Roseland, professor in the ASU School of Community Resources and Development at the Watts College and a Senior Global Futures Scientist, published the book "Toward Sustainable Communities: Solutions for Citizens and Their Governments" in 1992. The fifth edition of the book was published recently, offering a refreshed guide for creating vibrant, healthy, equitable and prosperous places, from the neighborhood to the regional level.



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#### Call for papers: Leonardo

Leonardo, a leading scholarly journal on transdisciplinary art and ASU partner is seeking submissions for its upcoming issue, "Histories, Legacies, and Futures of Image-Processing." Submissions can include general articles, technical articles or illustrated artists' notes, statements, interviews or speculative writing projects. Word

counts vary depending on submission type: more information on desired submissions can be found on the Leonardo website.

Read more



### In memoriam: Associate Professor Gaymon L. Bennett

Associate Professor Gaymon L. Bennett, an School for the Future of Innovation in Society- affiliated faculty member, died Feb. 1 at age 52 after a three-year battle with lung cancer. Through his intellect and positive spirits, Bennett made key contributions to the Center for the Study of Religion and Conflict, School of Historical, Philosophical and Religious Studies, the Humanities Institute, the Julie Ann Wrigley Global Futures Laboratory, the School for the Future of Innovation in Society and the Lincoln Center for Applied Ethics, where he served for several years as associate director. Read a tribute to his life and impact on ASU News.

Read more

### **Upcoming Events**



### Deep Pasts to Deep Futures: African urbanism and the future of civilization

As the fastest urbanizing region in the world, our planetary futures of place and civilization will be significantly influenced by African cities. The spaces that lie beyond our immediate grasp, on Earth or beyond, invite further reflection on what it means to make places of/for humanity and non-humanity. Hosted by the Future of Being Human Initiative.

Monday, March 11 1 p.m. – 3 p.m. (MST) ASU Memorial Union 085 (Union Stage)

Register



#### Global Water Futures: Anticipation and Innovation

Join this special World Water Day event celebrating our efforts to safeguard the world's most precious resource. Our vision is to establish a Global Water Collaboratory that propels action to tackle both existing and emerging water challenges. The Julie Ann Wrigley Global Futures Laboratory, in collaboration with Columbia University, Rice University, Sciens Water and the Circle of Blue, proudly presents this event.

Friday, March 22
WCPH Auditorium with Zoom
available for those outside of Tempe

**Event registration coming soon** 

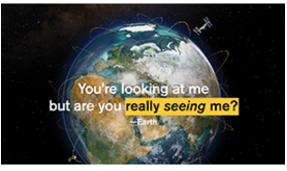


# Expert Insights on ChatGPT and the Future of Al

Miles Brundage, Head of Policy Research at OpenAI (the innovators behind ChatGPT), will discuss how we arrived at our current state in artificial intelligence development and provide unparalleled insights into what lies ahead for this rapidly evolving field.

Thursday, March 28, 2024 This is a virtual event

Register



#### **Earth Day**

Each April, the world comes together to celebrate our home planet, Earth. First recognized on April 22, 1970, the Julie Ann Wrigley Global Futures Laboratory now serves as the hub of activities at Arizona State University that honor Earth Day each April 22.

Learn more

### **Futurecast**

#### **Edition 5 | Fall 2023**

In this issue of Futurecast, we explore a number of topics including electrification, a conversation with



Arizona's State Climatologist Erinanne Saffell, the deployment of humanitarian aid in the face of global challenges and a museum exhibition that explores what Arizona may look like for the next generation.

Read now

### **Global Futures Viewbook**

### We must rediscover our planet and our relationship with it.

What does this mean, exactly? For the faculty, students, researchers and global partners of the Julie Ann Wrigley Global Futures Laboratory, it means a commitment to urgently exploring pathways to impactful solutions and decisions that address the challenges we have caused through resource extraction and thoughtless consumption as part of a relentless pursuit of "progress."

We believe better is possible.

Learn more











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