January
2024

Julie Ann Wrigley Global Futures Laboratory™
Arizona State University

Global Futures: Now

"Examine the present and learn from the past to see how the future will unfold." Shinjo Ito

We are living in a world of increasing polarization as simultaneous geopolitical events take place around the world, including Russia's invasion of Ukraine almost two years ago and the more recent conflict between Gaza and Israel. But this is not the first time our world has experienced such an unsettling situation.

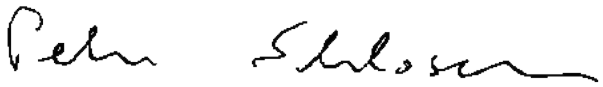
Recognizing patterns of the past, while reflecting on lessons from history is critical to understanding how to prevent geopolitical tensions from expanding their reach and further destabilizing our global society. For example, the catalyst for World War II did not emerge from a single event nor did it stem from a localized region. Rather, a series of significant global events including military invasions, territorial disputes, and a rise in populist leaders led to what is considered by many as the most devastating conflict in human history. While not exact parallels, the precursors to World War II share similarities to the present-day situation.

We are seeing military conflicts, trends toward authoritarian regimes, erosion of democracy, shifts in the geopolitical landscape and violent protests in response to political decisions or law enforcement activities, among other destabilizing actions taking place on local to global scales. Throughout history, a common denominator of societal instability remains the rise and collapse of empires and the conflicts between them. Around the world, there are - and always have been - different forms of governance including autocracies, dictatorships and democracies, but none of these systems appear to be stable enough to withstand challenges that erode their effective function.

This situation begs the question: are we actually governable? We go through phases of peace, and wars, yet what do we learn from them? As we aim to resolve our present-day crises, we must remember that history serves as a timeless teacher, offering lessons from the past that might illuminate a path toward a more peaceful and stable future.

The Global Futures Laboratory strives to understand the underlying causes of

the recurring instabilities and conflicts. To be successful in this quest we need the engagement of all disciplines, especially the social sciences and humanities.



Peter Schlosser
Vice President and Vice Provost of Global Futures

NSF awards regional innovation engine to Global Futures Laboratory to spur economic development in Southwest

The U.S. National Science Foundation announced that Arizona State University will guide a multi-institutional enterprise, based at the Julie Ann

Wrigley Global Futures Laboratory, to confront the climate challenges facing the desert Southwest and spur economic development in the region. This partnership, called the NSF Engines: Southwest Sustainability Innovation Engine, will use these unique challenges to catalyze economic opportunity and seeks to establish the Southwest as a leader in carbon capture, water security and renewable energy and bring high-wage industries to the region.

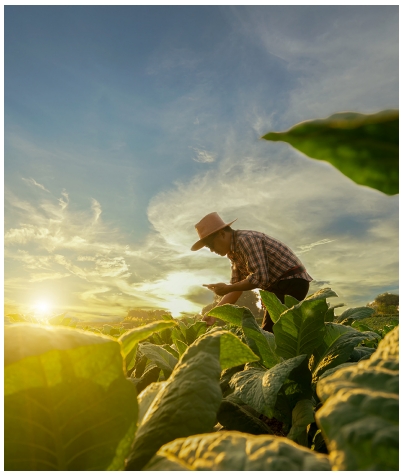
Learn more

Watch: Global Futures Conversations

"Extreme Events: The Impact of Climate Change on Our World's Future" took place in the Walton Center for Planetary Health's auditorium on Jan. 25. The event was moderated by Peter Schlosser and featured ASU experts Kelly Barr, Upmanu Lall and Jennifer Vanos. Watch the recorded conversation on YouTube.

Watch

Research



Global reductions in manual agricultural work capacity due to climate change

As we see temperatures rise over time, our current systems for food, water and resource gathering will likely need to adjust to meet the needs of humanity on a warmer planet. Jennifer Vanos, a senior Global Futures scientist and associate professor in the School of Sustainability, is an author on a recently-published paper on heat exposure and outdoor manual labor, specifically as it relates to agricultural work.

Read more

The effect of reef morphology on coral recruitment at multiple spatial scales

Rebuilding coral reefs can start as early as the larval stage, when the larvae are most mobile. One underutilized pathway to habitat protection is to protect the areas where coral larvae are most likely to settle. In a new paper published in PNAS, ASU scientists use airborne remote sensing and in situ photogrammetry to analyze the relationship between reef morphology and coral recruitment at multiple scales.

Read more

New research from Pacific RISA addresses climate impacts on island communities

The Pacific RISA team has recently published multiple papers in publications and reports including the International Journal of Climatology and the Journal of Water and Climate Change. Read more about Pacific RISA and their latest work on their website.

Read the IJC report

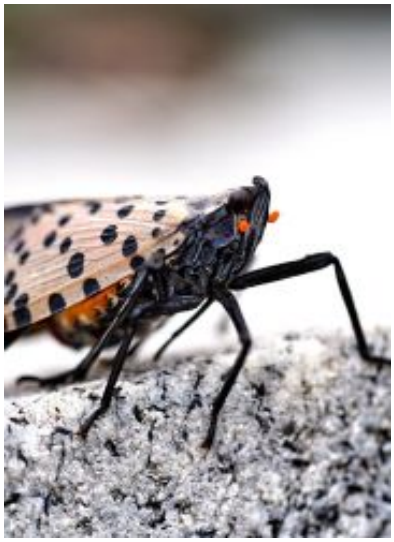
Read the JWCC report

News

An area of opportunity in space law: Timiebi Aganaba featured in WIRED

A recent article from WIRED highlights that Elon Musk — through his companies SpaceX and Starlink — owns and operates more than half of the active satellites orbiting the planet today. Many feel it is time to change that. Senior Global Futures Scientist and Assistant Professor Timiebi Aganaba , who has been instrumental in driving African interest in space law, said increased involvement and more regulations are needed to equitably face realities of space operations. “If the system gets built without you—if you come in later—people will start quoting laws to you,” she says in the article.

Read more



Looking for black market bugs? Talk to this Senior Global Futures Scholar

Senior Global Futures Scholar Lauren Weidner is the current curator of the School of Interdisciplinary Forensics. Recently, the school acquired more than 3,000 illegally trafficked bugs. Over the next year, Weidner and students in her individualized research class will be creating fact sheets for each insect as part of their final project. The detailed information will help federal agents and local investigators identify illegal insects coming into the United States.

Read more

Knowledge Exchange for Resilience uses data to better understand Arizona's housing crisis

Knowledge Exchange for Resilience, a discovery unit of the Julie Ann Wrigley Global Futures Laboratory, works to fill an information gap regarding housing in our state. Across ASU, KER and other programs are unleashing the power of data analytics and computational modeling to form a comprehensive view of Arizona's housing crisis. The information is aimed towards policymakers and community leaders to remediate and prevent homelessness.

Read more

Listen to the latest episode of "The Native Seed Pod"

In the most recent episode of the limited series "Knowledge Symbiosis: Can Biomimicry and Indigenous Science Harmonize?" Roxanne Swentzell and Anne LaForti engage in a conversation hosted by Co-Director of the Biomimicry Center Sara El-Sayed. The podcast,

co-hosted with School of Sustainability professor Melissa Nelson , is produced by The Cultural Conservancy's "Native Seed Pod" in collaboration with Arizona State University and "Learning From Nature: The Biomimicry Podcast."

Listen

Innovators wanted: Sign up for Cultivate PHX: Agrifood Tech Incubator

ASU's Rob and Melani Walton Sustainability Solutions Service, the J. Orin Edson Entrepreneurship + Innovation Institute and the City of Phoenix launched Cultivate PHX , a new incubator program dedicated to supporting agrifood ventures at the forefront of innovation in sustainable food systems and agriculture. Ventures will address key areas within the full lifecycle of food with advanced ventures seeking to pilot new technology. Cohort members will gain valuable benefits such as access to grant and seed funding opportunities, specialized training from experts, tailored programming to support product and business development and free co-working space. Applications are open now.

Learn more

Lekelia Jenkins named an International Science Council Fellow

Lekelia Jenkins works in what she calls “neglected spaces" — where the line of conservation workers is the thinnest, but the need is greatest. Her efforts have led to regulatory changes for more sustainable fisheries, advised international fisheries diplomacy and informed energy policy. Recently, she was named 2023 ISC Fellow, the highest honor that can be conferred on an individual by the International Science Council.

Read more

Steven Hartman joins ceremonial signing of the UNESCO-MOST BRIDGES Terms of Reference in Paris

This important milestone, which took place on Jan. 29, marks the commencement of the next operational phase and long-term governance of the UNESCO-MOST BRIDGES Coalition. Engaged with the ceremony was Steven Hartman , the founding executive director of the BRIDGES Sustainability Science Coalition in UNESCO’s

Management of Social Transformations program, based at the BRIDGES Flagship Hub in the Global Futures Laboratory. Learn more about the BRIDGES coalition at their website.

Read more

Expert Q&A

The role of educators in tackling global sustainability issues

In a Q&A with ASU News Iveta Silova , Senior Global Futures Scholar and associate dean of global engagement in the Mary Lou Fulton Teachers College, says education can play a role in addressing sustainability challenges. “What we see is a major disconnect between the growing knowledge about climate change and the failure of global and local social norms, economic systems and political institutions to respond boldly or quickly enough,” she says. “This is where education can play a key role in addressing global sustainability challenges.”

Read more

Clark Miller shares recommendations from new report to decarbonize US economy by 2050

COP28 called for increased efforts to transition away from fossil fuels, a feat that is achievable according to Clark Miller , director of the Center for Energy and Society. Miller has worked with leading U.S. researchers at the National Academies of Sciences, Engineering and Medicine and recently published a report, “Accelerating Decarbonization in the United States: Technology, Policy, and Societal Dimensions.” This report details implementation recommendations to achieve net-zero carbon emissions by 2050.

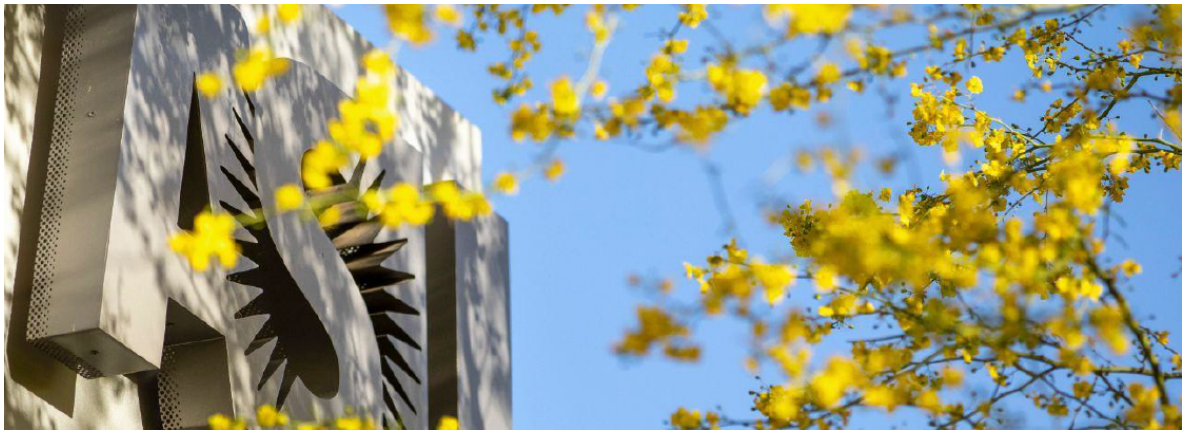
Read more

ASU professor explores the positive side of zombie apocalypse narratives

Senior Global Futures Scientist Athena Aktipis published “The Evolutionary Reasons We Are Drawn to Horror Movies and Haunted Houses” in the November issue of Scientific American, where she explains how curiosity about these

narratives can help overcome fears. Aktipis, also the assistant director of research at the Global Futures Laboratory, said humans possess a morbid curiosity about things that can harm them as a kind of survival strategy. This behavior can also be seen in other animals.

Read more



Global Futures in ASU's Year in Review

Global Futures Laboratory has contributed to some of the top developments across the university in 2023 in areas like heat, water, sustainability and more. As we start a new year of initiatives, innovation and partnerships, look back and see what was featured in ASU's 2023 Year in Review.

Read 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

Julie Ann Wrigley Global Futures Laboratory
Arizona State University

#1 in the U.S. for global impact
–Times Higher Education, 2021

Don't miss any future news

Be sure to receive this newsletter as well as other journals and updates including our biannual journal, Futurecast.

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