Recent CCHE News

In June, CCHE’s founding co-director Arianne Teherani and managing director Sapna Thottathil attended the 56th session of the subsidiary bodies of the United Nations Framework Convention on Climate Change in Bonn, Germany. Read their reflections and key takeaways on critical topics like the global stocktake, loss and damage funding, and the contested agenda of the upcoming COP28 meeting in Dubai.

In March, CCHE was awarded a $1 million climate action award to build resilience to the adverse health effects of wildfire smoke among the San Francisco Bay Area’s most vulnerable communities. The funding is part of a historic partnership between UC and the state of California to support UC innovation and entrepreneurship that advances California’s climate action goals.

Upcoming Events & Opportunities

CCHE is currently hosting a four-part webinar series on New Evidence and Innovations to Confront the Climate-Health Crisis.

Register for our final webinar discussion on August 23 on the climate and health impacts of our food systems, from production to consumption.

CCHE is launching a new clinical sustainability fellowship for UC faculty to propose decarbonization projects. Stay tuned for more details on how to apply.

Spotlight on CCHE Faculty & Fellows

CCHE co-founder Arianne Teherani (UCSF) and CCHE affiliated faculty Gina Solomon (UCSF) provided insights to UCSF News about how to stay safe during a summer heat wave.

The Planetary Health Report Card Initiative (PHRC) recently released its 2022-2023 summary report, which evaluates planetary health awareness and accountability among 96 medical schools globally. CCHE collaborated with PHRC fellows Erika
Strickler (UCI) and Gunnar Mattson (UCSF), with guidance from PHRC founder Karly Hampshire (UCSF), on an effort to complete the assessment across four of UC’s medical schools.

A recent perspective piece about PHRC’s Interviews without Harm Initiative was also cited by The Association of American Medical Colleges (AAMC) in their recommendations that medical schools and residency and fellowship programs use virtual interviews in order to reduce carbon footprints.

Research on the health impacts of wildfire smoke from UCSD’s Tarik Benmarhnia (CCHE Research Co-Chair) and UCSF’s Amy Padula was showcased in The San Francisco Examiner. The study found an association between exposure to wildfire smoke during pregnancy and the increased risk of newborns being large for gestational age.

A recent study from UCSD’s Jyoti Mishra (CCHE UC Climate Change and Mental Health Initiative Co-Chair) was covered as a notable Research Brief by The Conversation. Her novel research is the first to examine the cognitive impacts of climate trauma, demonstrating that exposure to the 2018 Camp Fire led to chronic differences in cognitive function and underlying brain activity.

Dr. Mishra’s work to merge mindfulness training with climate education in UC’s Bending the Curve was also featured by the Mind & Life Institute. The post describes her experience co-leading the CCHE UC Climate Change and Mental Health Initiative with UCSF’s Elissa Epel.

UCR’s Jade Sasser (CCHE Campus Lead for UCR) was interviewed in the final episode of the London Review of Book’s podcast series on climate chaos and reproductive justice to discuss her research into how climate anxiety shapes the reproductive decisions of young people today.

UCI’s Oladele Ogunseitan (CCHE Education Co-Chair and Campus Lead for UCI) and his work to disentangle the worldwide web of e-waste and climate change was featured in The Academic Minute.

Recent Peer-Reviewed Publications by CCHE Researchers and Affiliates

A full CCHE publications repository is forthcoming.

Heat, wildfires, and other extreme climate and weather events


Retrospective analysis of wildfire smoke exposure and birth weight outcomes in the San Francisco Bay Area of California. Anna Claire G. Fernández; Emilia Basilio; Tarik Benmarhnia; Jacquelyn Roger; Stephanie L. Gaw; Joshua F. Robinson; Amy M. Padula. Environmental Research: Health, 1(2): 025009, June 1, 2023.

Effect of different heat wave timing on cardiovascular and respiratory mortality in France. Anna Alari; Noemie Letellier; Tarik Benmarhnia. The Science of the Total Environment, 892: 164543, June 1, 2023.

Examining the relationship between extreme temperature, microclimate indicators, and gestational diabetes mellitus in pregnant women living in southern California. Anais Teyton; Yi Sun; John Molitor; Ji-Chuan Chen; David Sacks; Chantal Avila; Vicki Chiu; Jeff Slezak; Darios Getahun; Jun Wu; Tarik Benmarhnia. Environmental Epidemiology, 7(3): e252, May 31, 2023.


Extreme weather events and HIV: development of a conceptual framework through qualitative interviews with people with HIV impacted by the California wildfires and their clinicians. Parya Saberi; Kristin Ming; Emily A. Arnold; Anna M. Leddy; Sheri D. Weiser. BMC Public Health 23(1): 950, May 25, 2023.


The role of extreme heat exposure on premature rupture of membranes in Southern California: A study from a large pregnancy cohort. Anqi Jiao; Yi Sun; David A. Sacks; Chantal Avila; Vicki Chiu; John Molitor; Ji-Chuan Chen; Kelly T. Sanders; John T. Abatzoglou; Jeff Slezak; Tarik Benmarhnia; Darios Getahun; Jun Wu. Environment International, 173: 107824. March 2023.


Gestational age-dependent decrease in fetal Hofbauer cells in placentas from pregnancies exposed to wildfire smoke in California. Emilia Basilio; Nida Ozarslan; Sirirak Buarpung; Tarik Benmarhnia; Amy M. Padula; Joshua F. Robinson; Stephanie L. Gaw. medRxiv, preprint, January 12, 2023.


Climate, environmental, and health justice

Investigating the links between climate injustice and ableism: A measurement of green space access inequalities within disability subgroups. Emma Lasky; Chen Chen; Sheri D. Weiser; Tarik Benmarhnia. Environmental Health Perspectives 131(5): 57702, May 2023.


Climate-ready health sectors

A race to net zero—early lessons from healthcare’s decarbonization marathon. Kyle Lakatos; Arianne Teherani; Sapna E. Thottathil; Seema Gandhi; Sheri D. Weiser; Claire D. Brindis. Health Affairs Scholar, 1(1): qxad006, June 20, 2023.


Climate change and mental health

Association between urban green space and postpartum depression, and the role of physical activity: a retrospective cohort study in Southern California. Yi Sun; John Molitor; Tarik Benmarhnia; Chantal Avila; Vicki Chiu; Jeff Slezak; David A. Sacks; Jiu-Chiuan Chen; Darios Getahun; Jun Wu. Lancet Regional Health Americas, 21: 100462, March 26, 2023.

Differences in interference processing and frontal brain function with climate trauma from California’s deadliest wildfire. Gillian K. Greenan; Mathew C. Withers; Dhakshin S. Ramanathan; Jyoti Mishra. PLOS Climate 2(1): e0000125, January 2023.

**Climate-sensitive infectious diseases**


**Planetary health**

Genetic diversity goals and targets have improved, but remain insufficient for clear implementation of the post-2020 global biodiversity framework. Sean Hoban; Michael W. Bruford; Jessica M. da Silva; W. Chris Funk; et al. Conservation Genetics, 24(2): 181-191, 2023.