

*Activating the health sector in climate action for a resilient, healthier, and more equitable world*

## Summer 2023 Newsletter

### 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.

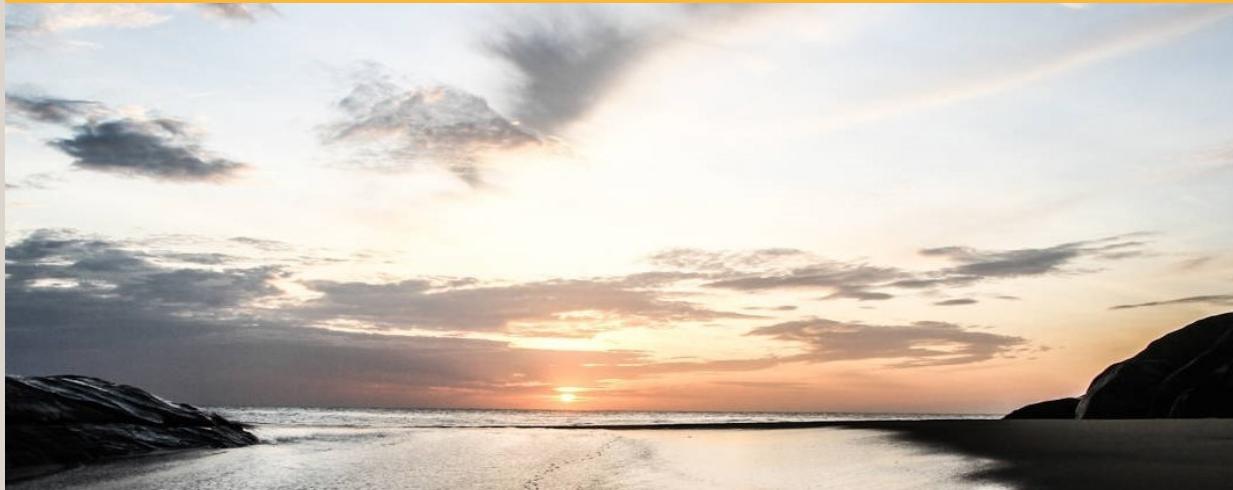
A recent [study](#) from **UCSD's Jyoti Mishra (CCHE UC Climate Change and Mental Health Initiative Co-Chair)** was covered as a notable Research Brief by [The Conversation](#). Her novel research is the first to examine the cognitive impacts of climate trauma, demonstrating that exposure to the 2018 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**

**Social vulnerability in US communities affected by wildfire smoke, 2011 to 2021.** Jason Vargo; Brooke Lappe; Maria C. Mirabelli; Kathryn C. Conlon. *American Journal of Public Health*, 113(7): 759-767, July 2023.

**It's the smoke, not the fire .** David P. Eisenman. *American Journal of Public Health*, 113(7): 724-725, July 2023.

**The role of ozone as a mediator of the relationship between heat waves and mortality in 15 French urban areas.** Anna Alari; Chen Chen; Lara Schwarz; Kristen Hdansen; Basile Chaix; Tarik Benmarhnia. *American Journal of Epidemiology*, 192(6): 949-962, June 2, 2023.

**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; Jiu-Chuan Chen; David Sacks; Chantal Avila; Vicki Chiu; Jeff Slezak; Darios Getahun; Jun Wu; Tarik Benmarhnia. *Environmental Epidemiology*, 7(3): e252, May 31, 2023.

**Humidity's role in heat-related health outcomes: A heated debate .** Jane W. Baldwin; Tarik Benmarhnia; Kristie L. Ebi; Ollie Jay; Nicholas J. Lutsko; Jennifer K. Vanos. *Environmental Health Perspectives*, 131(5): 55001, May 26, 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.

**Risk of systemic fungal infections after exposure to wildfires: a population-based, retrospective study in California.** Jennifer S. Mulliken; Karly N. Hampshire; Ana G. Rappold; Monica Fung; Jennifer M. Babik; Sarah B Doernberg. *Lancet Planetary Health* 7(5): e381-e386, May 2023.

**49 Spatial variation in the effect of heat waves on pediatric acute care utilization in California (2000-2019).** Allan Ndovu; Tarik Benmarhnia. *Journal of Clinical and Transitional Science*, 7(s1), April 24, 2023.

**Quantifying exposure to wildfire smoke among schoolchildren in California, 2006 to 2021.** Esther E. Velásquez; Tarik Benmarhnia; Joan A. Casey; Rosana Aguilera; Mathew V. Kiang. *JAMA Network Open*, 6(4): e235863, April 3, 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; Jiu-Chuan Chen; Kelly T. Sanders; John T. Abatzoglou; Jeff Slezak; Tarik Benmarhnia; Darios Getahun; Jun Wu. *Environment International*, 173: 107824. March 2023.

**Do precipitation anomalies influence short-term mobility in sub-saharan Africa? An observational study from 23 countries.** Adrienne Epstein; Orlando O. Harris; Tarik Benmarhnia; Carol S. Camlin; Sheri D. Weiser. *BMC Public Health* 23(1): 377, February 22, 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.

**A novel ensemble-based statistical approach to estimate daily wildfire-specific PM2.5 in California (2006-2020).** Rosana Aguilera; Nana Luo; Rupa Basu; Jun Wu; Rachel Clemesha; Alexander Gershunov; Tarik Benmarhnia. *Environment International*, 171: 107719, January 2023.

**Wildfire smoke exposure and emergency department visits for headache: A case-crossover analysis in California, 2006-2020.** Holly Elser; Sebastian T Rowland; Maksym S Marek; Mathew V. Kiang; Brittany Shea; Vivian Do; Tarik Benmarhnia; Andrea L. C. Schneider; Joan A. Casey. *Headache*, 63(1): 94-103, January 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.

**Inequities in ambient fine particulate matter: A spatiotemporal analysis in Canadian communities.** Megan Kirby-McGregor; Chen Chen; Hong Chen; Tarik Benmarhnia; Jay S. Kaufman. *The Science of the Total Environment*, 858(Pt 1): 159766, February 1, 2023.

**Advancing health equity in community-based climate action: From concept to practice.** Brian L. Cole; Irish Del Rosario; Astrid Hendricks; David P. Eisenman. *American Journal of Public Health*, 113(2): 185-193, February 2023.

**Along the energy justice continuum: An examination of energy disposal through the lens of feminist community based participatory action research.** Clare Cannon; Janae Bonnell; Mariah Padilla; Debbie Sulca. *Energy Research & Social Science*, 96: 102948, February 2023.

**Redlining has led to increasing rates of nephrolithiasis in minoritized populations: A hypothesis.** Kymora B. Scotland; Lara Cushing; Charles D. Scales Jr.; David P. Eisenman; David S. Goldfarb. *Current Opinion in Nephrology and Hypertension*, 32(1): 103-109, January 1, 2023.

**Translating and embedding equity-thinking into climate adaptation: an analysis of US cities.** Clare Cannon; Eric Chu; Asiya Natekal; Gemma Waaland. *Regional Environmental Change* 23(30), 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.

**Faculty Development for Education for Sustainable Health Care: A university system-wide initiative to transform health professional education.** Arianne Teherani; Tammy Nicastro; Matthew St. Clair; J. Cully Nordby; Arya Nikjoo; Sally Collins; Anushe Irani; Jennifer Monroe Zakaras; Sheri D. Weiser. *Academic Medicine* 98(6): 680-687, June 2023.

**Knowledge gaps in anesthetic gas utilization in a large academic hospital system: A multicenter survey.** Aalap C. Shah; Aaron J. Przybysz; Kaiyi Wang; Ian A. Jones; Solmaz P. Manuel; Rakhi Dayal; Michael J. Jung; Nina Schlömerkemper; Seema Gandhi. *Cureus* 15(3): e35868, March 7, 2023.

**Interview without Harm: Reimaging medical training's financially and environmentally costly interview practices.** Karly Hampshire; Hugh Shirley; Arianne Teherani. *Academic Medicine* 98(2): 171-174, February 2023.

### Climate change and mental health

**Harnessing the mental imprints of climate change for collective climate action .** Jyoti Mishra; Veerabhadran Ramanathan. *PLOS Climate* 2(6): e0000233, June 12, 2023.

**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-Chuan 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**

**Uncovering social and environmental factors that increase the burden of climate-sensitive diarrheal infections on children.** Anna Dimitrova; Alexander Gershunov; Morgan C. Levy; Tarik Benmarhnia. *Proceedings of the National Academy of Sciences (PNAS)* 120(3): e2119409120, January 2023.

### **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.

**Climate change, tree demography, and thermophilization in western US forests.** Kyle C. Rosenblad; Kathryn C. Baer; David D. Ackerly. *Proceedings of the National Academy of Sciences*, 120(18): e2301754120, May 2, 2023.

[cche.universityofcalifornia.edu](http://cche.universityofcalifornia.edu) | [Sign-Up for Our Newsletter](#) | @UCClimateHealth

Center for Climate Health and Equity | 521 Parnassus Ave, SF, CA 94143

[Unsubscribe](#) [climatehealth@ucsf.edu](mailto:climatehealth@ucsf.edu)

[Update Profile](#) | [Constant Contact Data Notice](#)

Sent by [yclimatehealth@ucsf.edu](mailto:yclimatehealth@ucsf.edu) powered by



Try email marketing for free today!