Stanford

# Qinqin Kong

Postdoctoral Scholar, General Internal Medicine

NIH Biosketch available Online  Curriculum Vitae available Online

## Bio

### BIO

I am currently a Postdoctoral Scholar in the Departments of Medicine and Health Policy at Stanford University, after earning a PhD in atmospheric science from Purdue University. My research interests lie at the intersection of climate change—particularly extreme heat—and human society. I aim to advance our understanding of the physical mechanisms, cascading impacts, and the effectiveness of potential mitigation strategies for human heat stress. My PhD research focused on how land-atmosphere interactions modulate heat stress, as well as the economic and energy impacts of increasing heat stress in the context of climate change. My postdoctoral research at Stanford evaluates the impact of heat stress on public health, especially human fertility, in low- and middle-income countries. My methodological areas of expertise include climate modeling, human biophysics modeling, and econometric modeling, which I am further developing at Stanford.

### HONORS AND AWARDS

- NCAR ASP Summer Program NSF funded, NCAR (2023)
- June L. and Tan (Mark) Sun Chen Research Scholarship, Purdue University (2023)
- NASA Future Investigators in Earth and Space Science Technology, NASA (2022)
- Henry Silver Graduate Scholarship, Purdue University (2022)

### STANFORD ADVISORS

- Eran Bendavid, Postdoctoral Faculty Sponsor

## Publications

### PUBLICATIONS

- **Heat Stress Metrics for US Census Tracts 1998-2020.** *Scientific data*
  Rahai, R., Kong, Q., Dogan, T., Evans, G. W., Wells, N. M.
  2026
- **A Global High-Resolution Comprehensive Heat Indices Dataset from 1950 to 2024.** *Scientific data*
  Malik, A., Masabathini, S., Shaikh, M. A., Kong, Q., Usman, M., Hari Prasad, D., Hoteit, I.
  2026
- **Age and livability in a hotter climate.** *EBioMedicine*
  Kenney, W. L., Cottle, R. M., Vecellio, D. J., Fisher, K. G., Leach, O. K., Kong, Q., Wolf, S. T.
  2025; 122: 106020
- **Migrant Laborers in India Face Increased Heat Stress Driven by Climate Warming and ENSO Variability** *EARTHS FUTURE*
  Mishra, V., Chuphal, D., Kong, Q., Raymond, C., Parsons, L., Kumar, R., Tumbe, C., Huber, M.

2025; 13 (11)

- **Spatial Patterns of Historical Changes in Human Heat Stress Disagree Across Metrics** *GEOPHYSICAL RESEARCH LETTERS*
  Kong, Q., Jing, R., Raymond, C., Tuholske, C., Heft-Neal, S., Wagner, Z., Wang, Z., Zimmer, A., Huber, M., Bendavid, E.
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- **Heat stress causes economic and welfare disparities across agroecological zones in Burkina Faso.** *Communications earth & environment*
  Houessou, M. A., Elnour, Z., Kong, Q., Grethe, H., Huber, M.
  2025; 6 (1): 744
- **A Linear Sensitivity Framework to Understand the Drivers of the Wet-Bulb Globe Temperature Changes** *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*
  Kong, Q., Huber, M.
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- **El Niño Enhances Exposure to Humid Heat Extremes With Regionally Varying Impacts During Eastern Versus Central Pacific Events** *GEOPHYSICAL RESEARCH LETTERS*
  Menzo, Z. M., Karamperidou, C., Kong, Q., Huber, M.
  2025; 52 (4)
- **A global high-resolution and bias-corrected dataset of CMIP6 projected heat stress metrics** *SCIENTIFIC DATA*
  Kong, Q., Huber, M.
  2025; 12 (1): 246
- **Mortality impacts of the most extreme heat events** *NATURE REVIEWS EARTH & ENVIRONMENT*
  Matthews, T., Raymond, C., Foster, J., Baldwin, J. W., Ivanovich, C., Kong, Q., Kinney, P., Horton, R. M.
  2025
- **A New, Zero-Iteration Analytic Implementation of Wet-Bulb Globe Temperature: Development, Validation, and Comparison With Other Methods** *GEOHEALTH*
  Kong, Q., Huber, M.
  2024; 8 (10): e2024GH001068
- **Regimes of Soil Moisture-Wet-Bulb Temperature Coupling with Relevance to Moist Heat Stress** *JOURNAL OF CLIMATE*
  Kong, Q., Huber, M.
  2023; 36 (22): 7925-7942
- **The Poverty Impacts of Labor Heat Stress in West Africa Under a Warming Climate** *EARTHS FUTURE*
  Saeed, W., Haqiqi, Kong, Q., Huber, M., Buzan, J. R., Chonabayashi, S., Motohashi, K., Hertel, T. W.
  2022; 10 (11)