

GHF
2025



Satellite Symposium

CLIMATE CHANGE AND HEALTH: ADAPTATION AND RESILIENCE IN A CHANGING WORLD

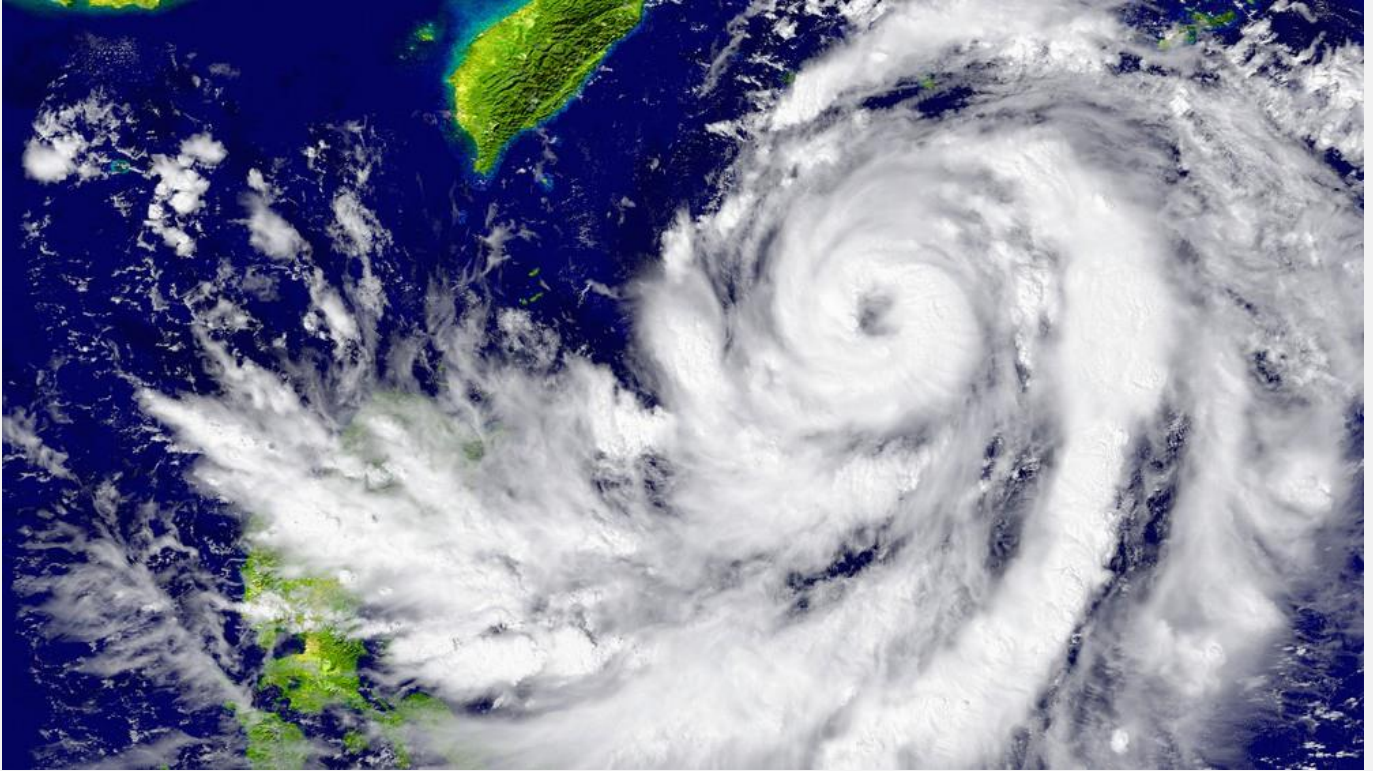


MAY 21, 2025
2pm- 3.30pm



Overview

Climate change is not just an environmental crisis; it is a public health emergency. Rising temperatures, extreme weather events, and shifting disease patterns are placing unprecedented stress on health systems, disproportionately affecting vulnerable populations. Strengthening adaptation and resilience is now essential to safeguarding human well-being.



Through discussions balancing scientific rigor with real-world implementation, this session will explore **advanced meteorology modeling, effective early warning systems, health co-benefits of climate action, and strategies from emerging AI-driven health surveillance to community-based adaptation**—ensuring no population is left behind.

By fostering collaboration across organizations and regions, the symposium had provided a platform to integrate health into climate adaptation policies, offered tools to measure health outcomes in local contexts and helped achieve shared goals for a resilient future.



Program

2.00 pm

Opening

Opening Remarks

Margaret Chan

Dean, Vanke School of Public Health, Tsinghua University; Emeritus Director-General, World Health Organization



Keynote Speech

María Neira

Director, Department of Environment, Climate Change and Health, World Health Organization



Context Setting

John S. Ji.

Associate Professor, Vanke School of Public Health, Tsinghua University



2.20 pm

Panel 1 - What is in the moment ?

Moderator

Jocalyn Clark

International Editor, Head of Scholarly Comment, The BMJ



Panelists

John S. Ji

Associate Professor, Vanke School of Public Health, Tsinghua University



Jessica Kronstadt

Program Director, Planetary Health Alliance, Bloomberg School of Public Health, Johns Hopkins University



Jian Zhou

Assistant Director, Institute of Energy, Environment and Economy, Tsinghua University



Yoonhee Kim

Associate Professor, Department of Global Environmental Health, University of Tokyo



Program

2.50 pm

Panel 2 - How to go forward ?

Moderator

Jocalyn Clark

International Editor, Head of Scholarly Comment,
The BMJ



Panelists

Cunrui Huang

Vice Dean, Professor, Vanke School of Public Health,
Tsinghua University



Jian Zhang

Vice President, Institute of Climate Change and Sustainable Development,
Tsinghua University



Katherine Littler

Co-lead, Global Health Ethics & Governance Unit,
World Health Organization



Sandro Demaio

Director and Head, Asia-Pacific Centre for Environment and Health,
World Health Organization Western Pacific Region



3.20 pm

Q&A

3.25 pm

Summary and Closing Remarks

Cunrui Huang

Vice Dean, Professor, Vanke School of Public Health,
Tsinghua University



3.30 pm

Light Meal and Refreshments

Opening Remarks

Dr. Margaret Chan delivered warm welcoming remarks, emphasizing the urgency of preparing the next generation to address climate health risks. She also highlighted VSPH's efforts in developing a Chinese edition of the book "Planetary Health" to cultivate young talent. Additionally, Dr. Chan called for greater attention to gender equality and inclusive development in climate action, energizing the audience with her direct approach.

Keynote Speech

Dr. María Neira, Director of the Department of Environment, Climate Change and Health at the World Health Organization, delivered the keynote speech. She began by showcasing China's success in reducing air pollution while maintaining GDP growth, presenting it as a model for sustainable development. Dr. Neira outlined three key areas where climate action yields significant health benefits: transitioning to renewable energy, promoting healthy urban planning, and advancing sustainable food systems.

She emphasized WHO's ongoing initiatives, including integrating health metrics into climate negotiations. Additionally, she highlighted the Alliance for Transformative Action on Climate and Health (ATACH), which supports member states in decarbonizing healthcare systems. She concluded health can be the most powerful argument for climate action.

"They are not just negotiating with the percentage of emissions of green gases. They are negotiating with our life."

Dr. María Neira.



Background Introduction

Associate Professor John S. Ji of VSPH provided detailed background on the significance of this meeting and reviewed the school's journey in climate change and health research. Professor Ji particularly proposed the important concept of "Health is the landing zone for climate change adaptation," noting that unlike climate change mitigation which can be measured in CO2 equivalent tons, adaptation involves multiple dimensions and is difficult to measure. He hoped this meeting would explore how to establish a health-centered climate adaptation indicator system.

The following two panel discussions were moderated by Dr. Jocalyn Clark, International Editor and Head of Scholarly Comment at The BMJ, focusing on "Current Situation Analysis" and "Future Development Pathways." Multiple scholars and experts engaged in in-depth discussion and exchange.



"Health is the landing zone for climate change adaptation."

Pr John S. Ji

Panel Discussion I: What's in the Moment? From Scientific Evidence to Practical Application

The first panel discussion invited Professor Andy Haines from the London School of Hygiene and Tropical Medicine, Associate Professor John S. Ji from VSPH, Program Director Jessica Kronstadt from the Planetary Health Alliance, Assistant Director Jian Zhou from the Tsinghua University Institute of Energy, Environment and Economy, and Associate Professor Yoonhee Kim from the University of Tokyo to conduct in-depth analysis of the current climate change and health situation.

Andy Haines first pointed out that humanity has entered unprecedented dangerous territory, with global temperatures rising above 1.5°C, and six of the nine planetary boundaries have been transgressed. These planetary boundaries include climate change, biodiversity loss, and land-system change, which interact to produce complex impacts that will accelerate irreversible damage. He emphasized that mitigation and adaptation must proceed simultaneously, and particularly called for strengthening transdisciplinary implementation science research to effectively implement climate action: “Both adaptation and mitigation are essential through integrated action. But I would argue that we need to focus not just on the theoretical concepts, but on implementation.”

John S. Ji used satellite images to demonstrate the coexistence of increased life expectancy and urban heat island effects brought by urbanization, analyzing the potential benefits of “sponge city” solutions. Jessica Kronstadt emphasized comprehensive considerations from a planetary health perspective, noting that climate adaptation needs to consider biodiversity loss and other multifaceted factors, pointing out the key role of values in adaptation decision-making.

Jian Zhou shared typical cases of healthcare system decarbonization in China, demonstrating the carbon reduction potential of hospital buildings and medical equipment, and proposing carbon reduction pathway scenarios and evaluation indicators.

Yoonhee Kim emphasized the importance of the systematic evaluation of the effectiveness of health interventions for climate change adaptation, particularly complex interventions. She also underscored the need for tailored approaches that account for cultural and psychological barriers faced by populations with mental health conditions in accessing intervention facilities, such as cooling centers.



Panel Discussion II: How to go forward? Building Resilient Health Systems

The second panel discussion focused on how to continue advancing climate change health adaptation, with participants including Professor Cunrui Huang from VSPH, Vice Dean Jian Zhang from Tsinghua University Institute for Climate Change and Sustainable Development, Co-leader Katherine Littler from WHO's Global Health Ethics and Governance Unit, and Director Sandro Demaio from the WHO Western Pacific Regional Office's Asia-Pacific Centre for Environment and Health.

Cunrui Huang proposed three priorities for building climate-resilient health systems: integrating health into climate governance core, noting that the unacceptable status quo of climate health funding accounting for only 0.5% of multilateral climate funds; empowering local solutions with global science, promoting AI early warning systems and precision public health big data technologies; and strengthening transdisciplinary research while integrating health resilience into urban planning.

Jian Zhang emphasized the necessity of climate health literacy education. He introduced that the Global Alliance of Universities on Climate (GAUC) led by Tsinghua University has already developed climate-health education at 400 universities in 74 countries. He particularly emphasized that this year's climate agenda priority is establishing an adaptation indicator system, noting that within the Global Goal on Adaptation (GGA) work program under the UN Climate Change Conference (COP) framework, what gets measured determines policy priorities and investment decisions.

Katherine Littler emphasized the importance of climate health ethics frameworks in indicator systems, pointing out that ethical issues in climate decision-making are often overlooked. WHO is promoting climate ethics framework development and related case studies, emphasizing ethical challenges in resource allocation.

Sandro Demaio shared practical opportunities for building resilient systems from a regional perspective, including three major opportunities in the Asia-Pacific region: existing successful actions, young population advantages, and WHO's new environmental health projects being established. He also noted that climate action should not be limited to annual meetings but requires building sustained global cooperative movements. During the interactive session, participants engaged in in-depth exchanges on multiple key issues of climate health.



Closing Summary

After the exciting discussion sessions, Professor Cunrui Huang summarized three key messages:

- climate change is not a distant threat, it is harming health now;
- adaptation requires innovation and equity;
- collaboration is non-negotiable.

Additionally, he briefly introduced the upcoming Fifth World Health Forum to be hosted by Tsinghua University Vanke School of Public Health, themed “Climate Change & Health: Responsibility, Governance, and a Shared Future for Mankind.” He cordially invited all parties to participate, to continue deepening international cooperation on this important issue.

The side event provided an in-depth exploration of core issues including

health indicator systems for climate adaptation, resilience-building frameworks, and ethical governance. A key emphasis was placed on integrating health considerations as a central element in climate policy-making, offering critical scientific foundations and practical pathways for advancing global climate-health governance.

Through its consistent promotion of such high-level international dialogues, Tsinghua University Vanke School of Public Health is accelerating the formation of a “science-policy-action” continuum to address climate-related health risks.

These efforts demonstrate China’s intellectual contributions alongside global solutions to safeguard humanity's shared healthy future

Key Messages



1. The crossing of six of the nine planetary boundaries highlights an unprecedented health and environmental emergency.
2. Integrate health indicators into climate negotiations.
3. Create health-specific indicator systems to guide climate change adaptation.
4. Strengthen transdisciplinary research focused on practical implementation.
5. Decarbonize health infrastructure, with specific indicators and emission scenarios to guide policies.
6. Address the data gap on climate impacts on mental health, particularly among vulnerable populations.
7. Highlight the role of climate health education (deployed in 400 universities in 74 countries).
8. Build ethical frameworks to guide the allocation of resources and the prioritization of actions in climate health.
9. Promote the use of technologies (AI, big data) for early warning systems, while promoting local solutions to strengthen resilience.
10. Continue global collaboration beyond one-off events, developing lasting partnership



清华大学
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VANKE SCHOOL OF PUBLIC HEALTH
TSINGHUA UNIVERSITY

The Vanke School of Public Health at Tsinghua University, established on April 2, 2020, is a strategic response to global health trends and national health demands. The School leverages Tsinghua's multidisciplinary strengths to foster cross-disciplinary collaboration and innovative training models. It focuses on four core areas: public health security, holistic health, health big data and health policy and management. With a primary focus on graduate education, the School aims to become a leading hub for talent cultivation, interdisciplinary innovation, policy support for "Healthy China," and a model of global health governance.



Geneva
Health
Forum

The Geneva Health Forum is a non-profit initiative launched in 2006 by the Geneva University Hospitals and the University of Geneva. It provides a neutral platform for dialogue and collaboration between public stakeholders, academia, civil society, and the private sector.

It collaborates with its partners to create synergies to address public health challenges.



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