SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

NIHR GLOBAL HEALTH RESEARCH CENTRE FOR NON-COMMUNICABLE DISEASE AND ENVIRONMENTAL CHANGE

ABOUT THE CENTRE

The NIHR Global Health Research Centre for Non-Communicable Disease And Environmental Change (GHRC-NCD EC) has been researching the linkage between heat and health since 2010, with a special focus on occupational health, but not barring community well-being. This sustained effort was crucial to generate the needed evidence to bring to light the adverse effects of extreme heat, especially in an already tropical country like India, where heat is perceived as “natural”. The need to generate evidence to design feasible and sustainable interventions, policy changes, and prepare ourselves for a hotter world is of paramount importance.

MISSION

The India Heat Team is committed to creating a healthier, safer, and more resilient climate world through our heat research.

"Our mission is to pioneer control measures and evidence-based interventions to safeguard communities from the growing threat of heat-related illnesses, driven by rising global temperatures. Our team is dedicated to researching all the facets of heat impacts, including gender and vulnerable communities, for finding tailored, sustainable and feasible interventions to combat and adapt to climate change and its impacts.”

OUR VISION

Our vision is a world where no community or individual suffers from the devastating effects of heat-related illnesses and where innovative solutions and evidence-based practices are harnessed to adapt and thrive in a warming climate.

PRINCIPAL INVESTIGATOR

Dr. Vidhya Venugopal, M.Sc, Ph.D.

Professor
(Environmental & Occupational health)
Certified Industrial Hygienist (BOHS)

Country Director
NIHR GHRC NCD-EC
Dept. of Environmental Health Engineering
Faculty of Public Health
Sri Ramachandra Institute of Higher Education and Research (DU), Chennai, Tamil Nadu, India

About Dr. Vidhya Venugopal

Dr. Venugopal collaborates with a specialised team of interdisciplinary scientists as an Occupational Hygienist and Climate Change Scientist to uncover the links between "heat, workload, and dehydration" and renal health. In partnership with national and international agencies, Dr. Venugopal has completed six large-scale epidemiological projects on "Occupational Heat Stress and Health," involving organizations such as SIDA, DST, La Isla Network, the Swedish Research Council, DHR, and the American Red Cross.

Currently, Dr. Venugopal serves as the Country Director for the NIHR-SRIHER Global Healthcare Research Centre for Non-communicable Disease and Environmental Change, a multi-institutional collaborative project. Additionally, Dr. Venugopal co-leads the project “Effects of Extreme Heat on Maternal, Placental, and Foetal Physiology, Lactation, and Newborn Health in India (HiP-India)” funded by the Wellcome Trust.

As a certified Industrial Hygienist with the British Occupational Health Society and a key member of the HOTHAPS research group focused on heat stress and occupational health, Dr. Venugopal has established key collaborations across Europe, China, Indonesia, the United States, Australia, New Zealand, and Sri Lanka. In the role of Consultant Occupational Hygienist, Dr. Venugopal has worked with 108 different industries, successfully implementing positive interventions to reduce occupational exposures through engineering, administrative, and personal protection measures. The "Heat Stress Prevention Guide," prepared by Dr. Venugopal’s team, has been utilized by 350 enterprises in India and several in the Middle East to protect workers from heat stress.

In the realm of heat and health, Dr. Venugopal has supervised 10 Ph.D. students in India and co-supervised 4 international students. Research findings have been presented at over 40 international conferences, including a plenary session at the International Congress on Occupational Health (ICOH, 2018). As the main author of the Working Group report on Heat Stress, Dehydration, and kidney disease for CENCAM, Dr. Venugopal was also invited to the 51st Meeting of the CIS Network by the International Labour Organization in Turin. Contributions to the WHO-WMO State-of-the-Art report on Occupational Heat Stress's health effects further highlight Dr. Venugopal’s expertise.

THE TEAM

Dr. Vidhya Venugopal

Country director
NIHR GHRC NCD-EC

Co-lead
(HiP- India)

CO-PI
NIH (INDIA_FOCUS)

Dr.PK Latha

Project Scientist
Environmental Engineering and management

Rekha S

Principal project associate
OBG Nursing

Sajeeth Kumar S

Project associate II
MPH

Akshaya P

Project associate II
MPH

Gayathri KG

Project associate II
MPH

Sandhya Bharathi S

Ph.D. Scholar
M Sc. PH

Tanya Isaac

Project associate II
MPH

Raja Maarthi

Project associate I
MPH

Ranjith S

PG trainee JIH
ME Industrial and Engineering

Kailasam K

PG trainee JIH
ME Industrial and Engineering

Subashini T

Scientific Admin Assistant
M Sc. Chemistry

Yeswanth B

Scientific Admin Assistant
B.Com
CIBOP

CURRENT PROJECTS

CURRENT PROJECTS

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HiP-India
Heat in pregnancy

Effects of extreme heat on maternal, placental and foetal physiology, lactation and newborn health in India (HiP-India)

Funded by

wellcome
Wellcome Trust UK

Fund Sanctioned: ₹ 2 Crores

Project duration: **5 Years**

Collaborators

thsti Translational Health Science and Technology Institute
The George Institute for Global Health
UNIVERSITY OF OXFORD
Care mother
IIT Delhi
St George's University of London
PONDICHERRY INSTITUTE OF MEDICAL SCIENCES

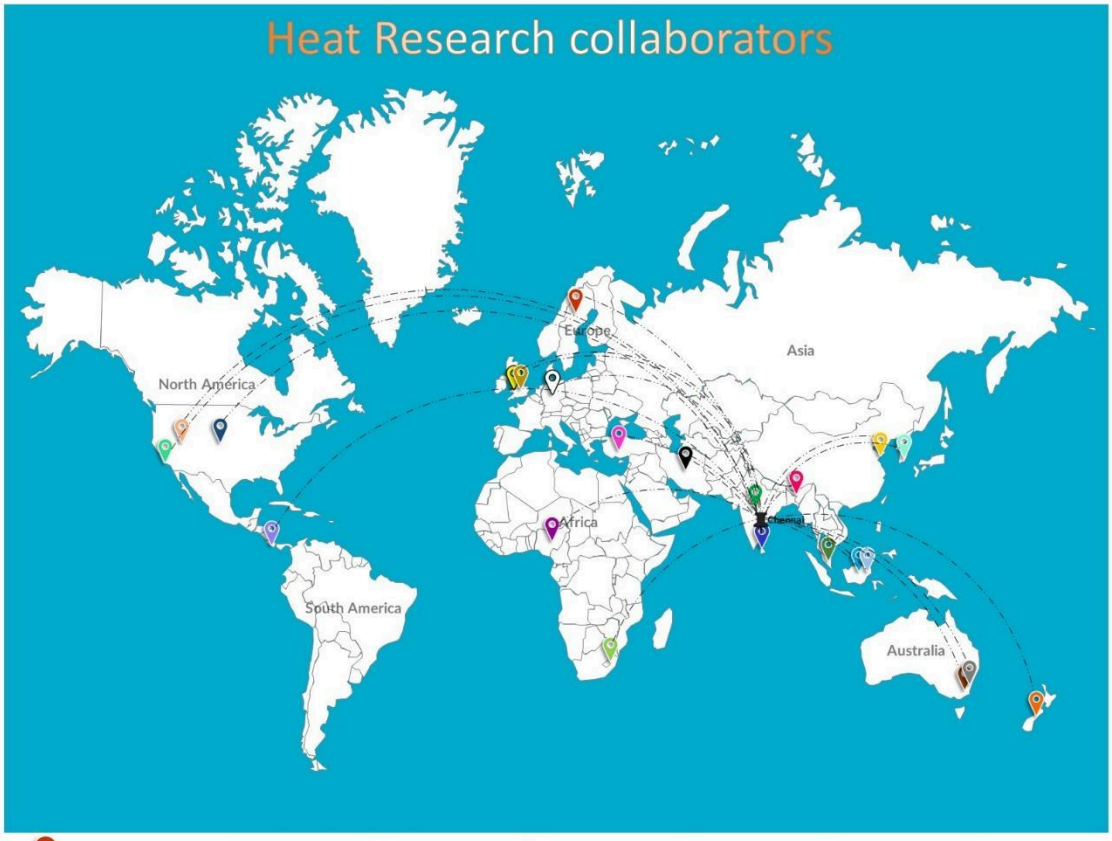
Project outline

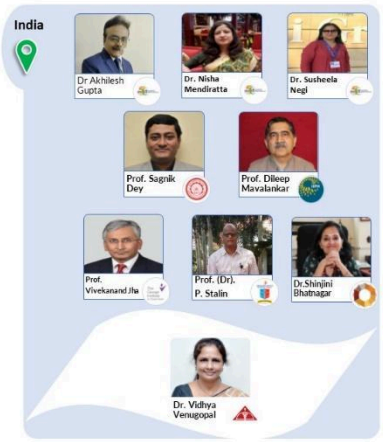
- To evaluate the epidemiological association between environmental heat exposure and adverse pregnancy outcomes.
- To capture women's lived experiences with heat, identifying opportunities for local heat adaptation.
- To bring together policymakers, researchers, clinicians, and people living with heat to develop practical policies and actions that will protect women and their babies.

PI-SRIHER for Capturing Individual Environmental Exposures and Heat Stress

Dr. Vidhya Venugopal
Professor & Country Director (**NIHR GHRC NCD-EC**)
Department of EHE, Faculty of Public health, SRIHER

OUR RESEARCH COLLABORATORS





COLLABORATING/ADVISING INSTITUTIONS

INTERNATIONAL:

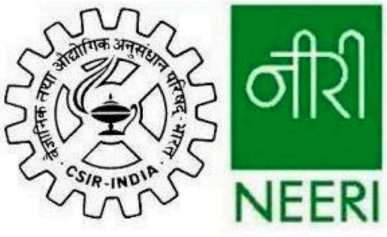






COLLABORATING/ADVISING INSTITUTIONS

NATIONAL:



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PUBLICATIONS

1. Anuj Kapilashrami, Ekatha Ann John, Roomi Aziz, Kit Chan, Kolitha Wickramage; National Advisory Group for MiHSA Priority Setting Initiative; International Advisory Group for MiHSA Priority Setting Initiative; India Experts Group for MiHSA Priority Setting Initiative ‘’ Bridging the gap: Using CHNRI to align migration health research priorities in India with local expertise and global perspectives’’, Journal of Global Health, November 2023 9;13:04148. doi:10.7189/jogh.13.04148. PMID: 37934961; PMCID: PMC10630695 (IF: 7.664) (International) (Q1)
2. Rekha Shanmugam, Nalini SJ, Bhuvana S, Kanmani S, Jane Hirst, **Vidhya Venugopal,** “Heat stress and adverse pregnancy outcome: Prospective cohort study”, An International Journal of Obstetrics & Gynaecology (BJOG), October 2023; 00: 1–11, https://doi.org/10.1111/1471-0528.17680. (IF: 7.331) (International) (Corresponding author) (Q1)
3. **Vidhya Venugopal**, Robin Lennqvist, PK Latha, Rekha Shanmugam, Manikandan Krishnamoorthy, Nandhini Selvaraj, Rajagurusamy Balakrishnan, R. Omprashant, Anil Jacob Purty, Joy Bazroy, Jason Glaser, Kristina Jakobsson, “Occupational Heat Stress And Kidney Health In Salt Pan Workers”, KI Reports, Vol.8 issue 7 P1363-1372, JULY 2023, https://doi.org/10.1016/j.ekir.2023.04.011 (IF: 4.164) (International) (First & corresponding author) (Q1)
4. Oommen John, Balaji Gummudi, Anubhuti Jha, Natarajan Gopalakrishnan, Om P. Kalra, Prabhdeep Kaur, Vijay Kher, Vivek Kumar, Ravi Shankar Machiraju, Nicolas Osborne, Subrata Kumar Palo, Sreejith Parameswaran, Sanghamitra Pati, Narayan Prasad, Vinay Rathore, Mohan M. Rajapurkar, Manisha Sahay, Ravi Raju Tatapudi, Jarnail S. Thakur, **Vidhya Venugopal**, Vivekanand Jha, “Chronic kidney disease of unknown etiology In India: What do we know and where do we need to go”. Kidney InternationalReports.1 Nov(2021);6(11):2743-51.ISSN:2468-0249)https://doi.org/10.1016/j.ekir.2021.07.031 (IF: 4.164) (International) (Corresponding author) (Q1)
5. **Vidhya Venugopal**, Shnmugam Rekha, Kamalakkannan Latha Perumal. "Heat-health vulnerabilities in the climate change context—comparing risk profiles between indoor and outdoor workers in developing country settings.” Environmental Research Letters. 30 Jul (2021); 16(8):085008. ISSN: 1748-9326 https://doi.org/10.1088/1748-9326/ac1469. (IF:6.793) (International) (First & corresponding author) (Q1)
6. **Vidhya Venugopal**, Latha PK, Shanmugam R, Krishnamoorthy M, Srinivasan K, Perumal K, Chinnadurai JS. “Risk of kidney Stone among Workers Exposed to High Occupational Heat Stress-A Case Study from Southern Indian Steel Industry”. Science of the Total Environment. 20 June (2020), 722, 137619. ISSN: 0048-9697, DOI: https://doi.org/10.1016/j.scitotenv.2020.137619. (IF: 6.551) (International) (First & corresponding author) (Q1)
7. **Vidhya Venugopal**, Shanmugam Rekha, Krishnamoorthy Manikandan, Perumal Kamalakkannan Latha, Viswanathan Vennila, Nalini Ganesan, Perumal Kumaravel, & Stephen Jeremiah Chinnadurai. “Heat stress and Inadequate Sanitary Facilities at Workplaces–an Occupational Health Concern for Women?" Global Health Action 9(1), (2016): 31945. ISSN: 16549716, 16549880, https://doi.org/10.3402/gha.v9.31945. (IF: 2.996) (International) (First & corresponding author) (Q1)
8. **Vidhya Venugopal**, Jeremiah Chinnadurai, Rebekah Lucas, & Tord Kjellstrom. “Occupational Heat Stress Profiles in Selected Workplaces in India”. International Journal of Environmental Research and Public Health, 13(1), 29 Dec (2015); 89. ISSN 1660-4601;

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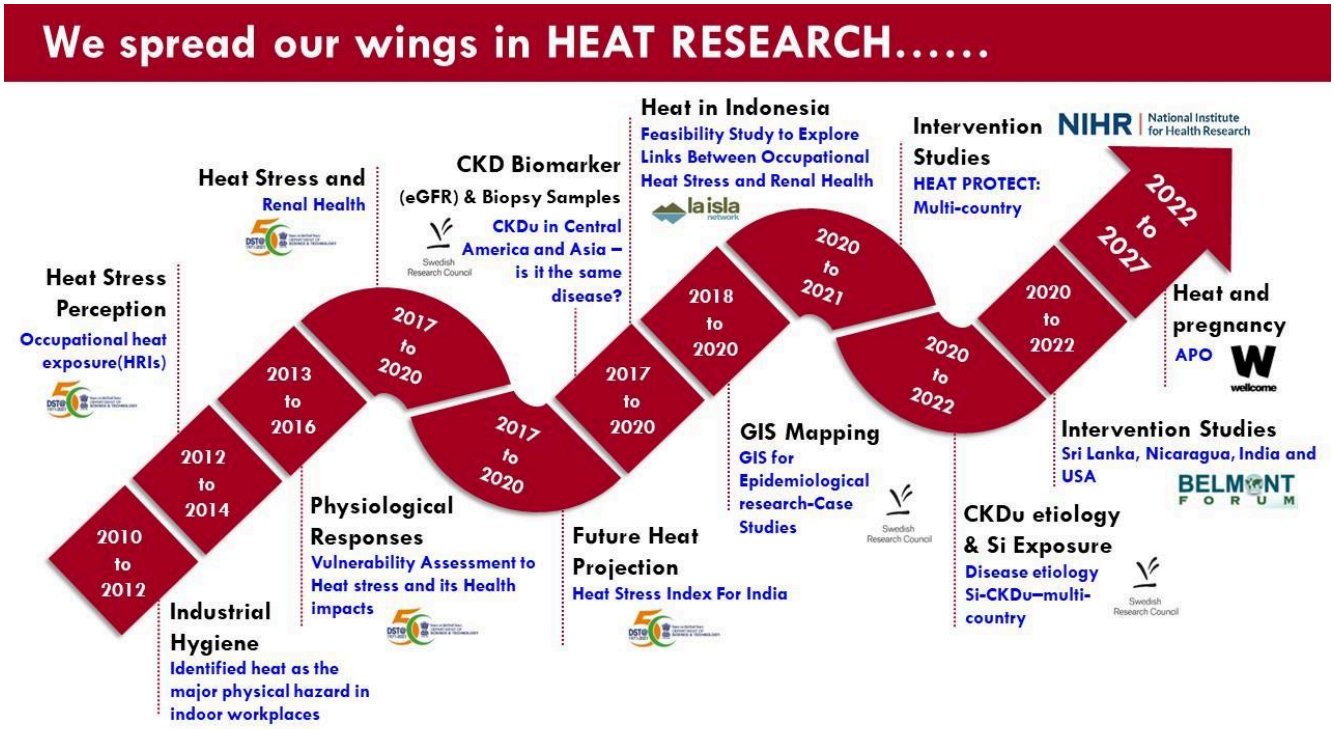
GLIMPSES OF OUR PAST PROJECTS: SINCE 2010



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Please scan the QR code or visit India Heat Team (https://sites.google.com/view/indiaheatteam/home) for more information