PORTFOLIO

BHAVYA PATHAK

Funded by the European Union

This project has received funding from the European Union's Horizon Europe research and innovation program under the Marie-Sklodowska-Curie Grant Agreement no 101073357

UNIKLINIK RWTH AACHEN

I am an indoor environment and sustainable building specialist, passionate about solutions that improve building performance for both people and planet in a changing climate. My work focuses on occupant experiences in dynamic indoor environments to advocate for salutogenic spaces. My expertise brings together sustainability in built environment, multi-domain indoor comfort and human adaptation.

Bhavya Pathak

Indoor environment and
sustainable building specialist

Knowledge Sphere

Multi-domain indoor comfort

Health and well-being in built environment

Building Performance (Energy, Carbon)

Life Cycle assessment and circularity

Design (Architectural and Research)

Building materials (including bio-based)

Experience

07.2023 onwards — *Scientific Researcher*
University Hospital RWTH Aachen, Germany

06.2021 – 05.2023 — *Research Associate*
CARBSE, CEPT University, India

08.2018 – 05.2019 — *Graduate Research Assistance*
SSA, CUNY, N.Y., U.S.A

09.2017 – 07.2018 — Principal Architect
Self-employed, India

06.2017 – 08.2017 — Junior Architect
Ashvin Modi Architects, India

Education

11.2023 - ongoing — *Doctoral Candidate*
Faculty of Architecture, RWTH Aachen, Germany

09.2017 – 07.2018 — *Master of Architecture*
Bernard and Anne Spitzer School of Architecture (SSA), CUNY, N.Y., U.S.A

06.2017 – 08.2017 — *Bachelors in Architecture*
Faculty of Architecture, SVIT Vasad, Gujarat University, India

Skills

Programming

Python, R

Software

Architectural design – CAD, Revit, Rhino

Building performance – daylight and energy simulations, PHPP

Others – 3DS max, Microsoft Office, LaTeX, Kubios for HRV

Other

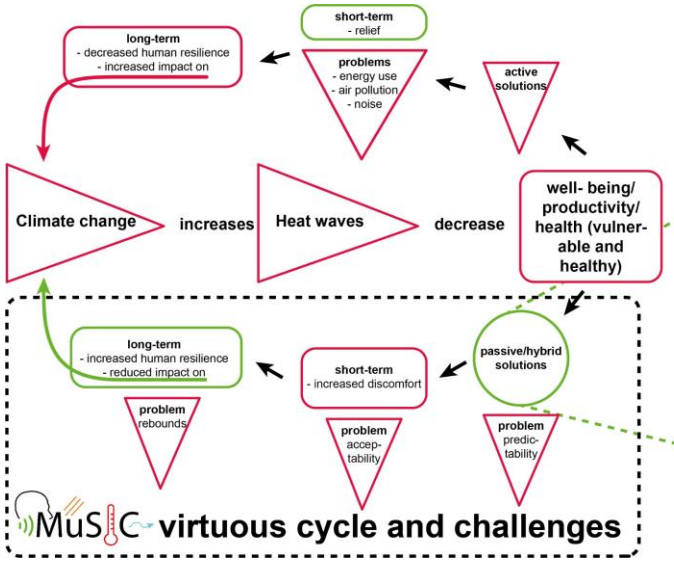
Teaching
seminar, workshop, conference organisation

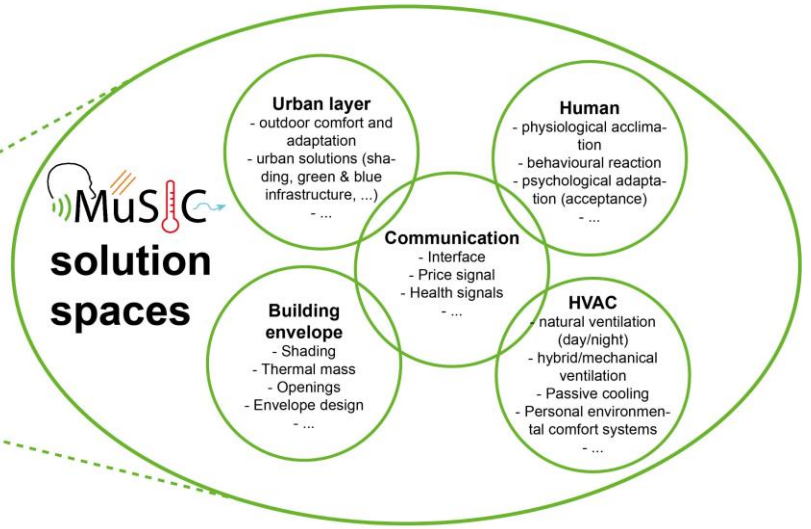
Human-centric design

Multi-Sensory Solutions

Indoor and Outdoor

Climate change





01.12.2022 – 30.11.2026

MuSIC- Doctoral Network

Long-term physiological, psychological and behavioural daytime adaptation

07.2023 – 07.2026

Objectives

The research aims to understand how dynamic multi-sensory experiences may shape the comfort evaluations of occupants in the moment and how that connects to a longer temporal scale.

Methodology

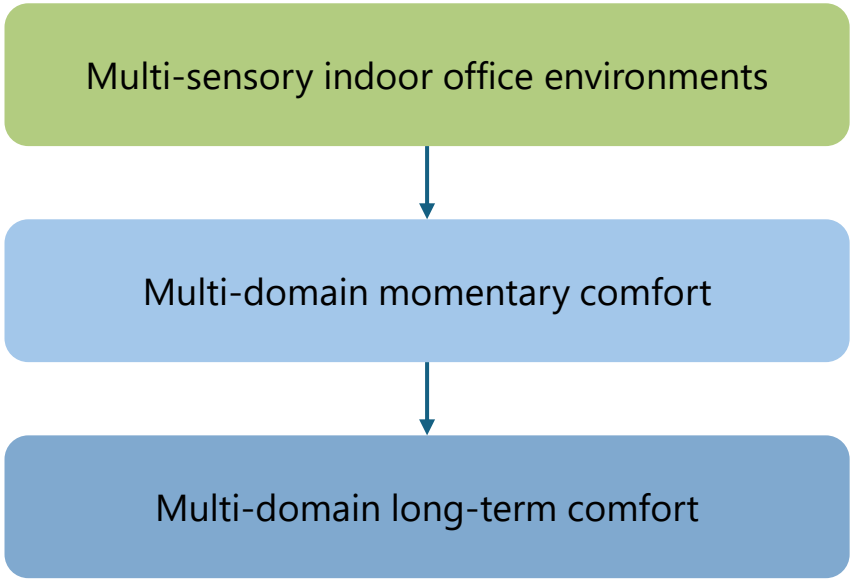
A combination of field study and lab experiment will be conducted to investigate multi-sensory exposure scenarios within work environments with either real or simulated work loads.

Secondments

UCLouvain
Louvain research institute for Landscape, Architecture, Built environment

DTU

VELUX®



Impact

The research will add scientific knowledge on the how occupants form comfort evaluations over longer temporal scales, given the psychological, physiological and behavioural adaptations experienced over time due to multi-domain environmental stimuli in workplaces.

Individual Research Project

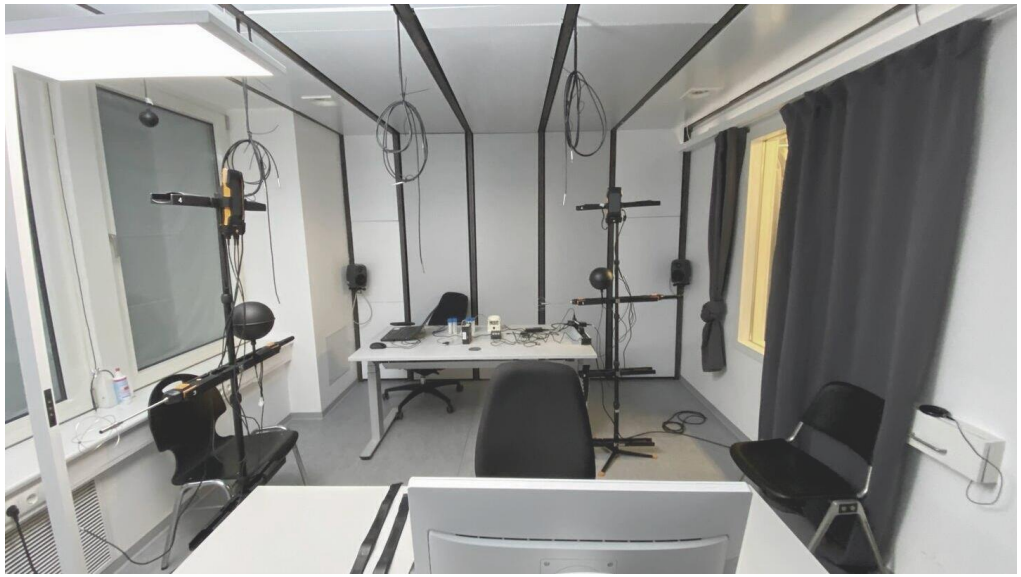
MuSIC- Doctoral Network

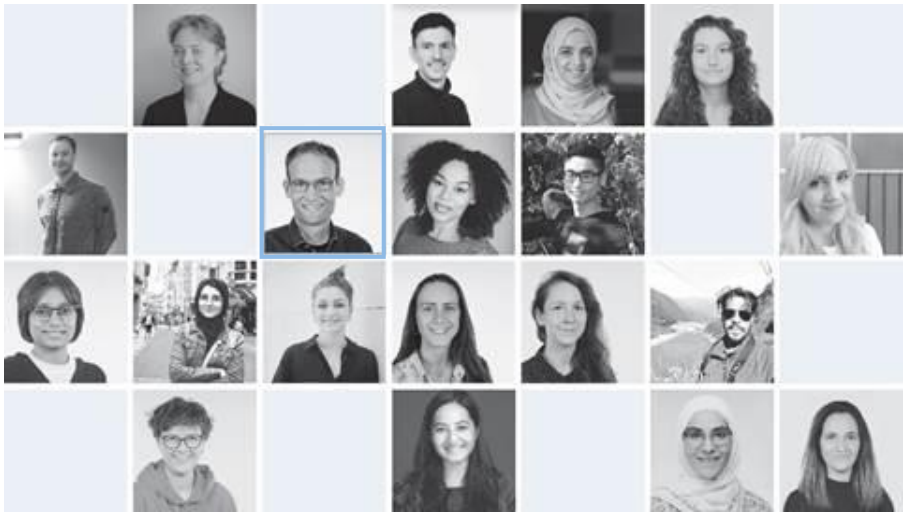
Long-term physiological, psychological and behavioural daytime adaptation

Affiliation

Healthy Living Spaces Lab, Institute of Occupational, Social, Environmental Medicine, University Hospital RWTH Aachen

Chair of Healthy Living Spaces, Faculty of Architetcure, RWTH Aachen University





Prof. Marcel Schweiker
Ph.D. Supervisor

MUSIC doctoral network x UNIKLINIK RWTH AACHEN

Individual Research Project

MuSIC- Doctoral Network

Understanding multi-sensory environments from occupants' perspective

Goal: How are multi-domain indoor environments experienced by occupants in work spaces.

Method:

- Observational field study in shared office spaces
- environmental monitoring
- recording subjective responses on momentary comfort – RHRN and retrospective

UCLouvain

Louvain research institute for Landscape, Architecture, Built environment

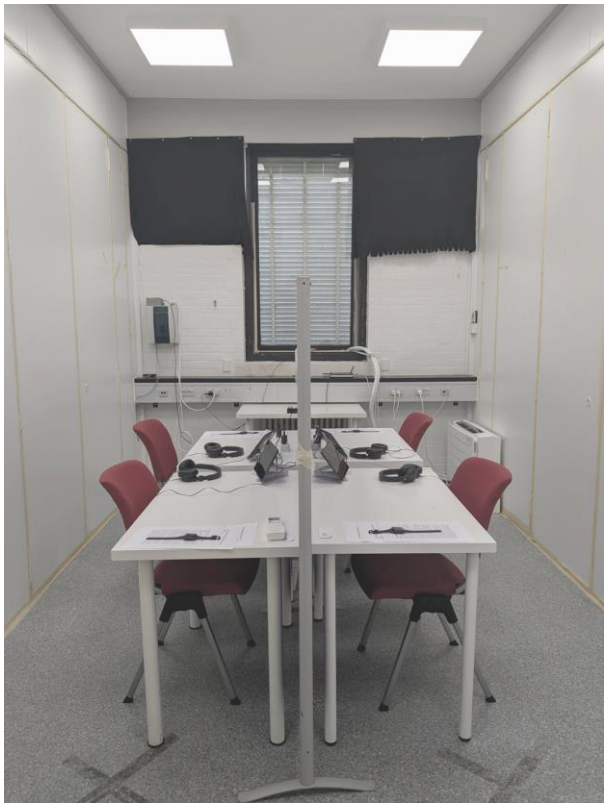
Location: Louvain research institute for Landscape, Architecture, Built Environment (LAB), U.C.Louvain

Team: Bhavya Pathak, Laura Marin-Restrepo, Peiman Pilehchi Ha, Sergio Altomonte, Marcel Schweiker

Multi-domain indoor comfort and temporal connections

Goal: How do multi-sensory stimuli affect momentary comfort in different domains and what factors mediate the translation of momentary comfort to long-term comfort.

Method:
- Randomised, controlled cross-over lab experiment
- simulating shared office spaces
- mono and multi-domain timed stimulus
- Acoustic and visual domain



Location: International Centre for Indoor Environment and Energy (ICIEE), DTU Sustain, DTU

Team: Bhavya Pathak, Tanmay Dave, Camilla Massucci, Jan-Frieder Harmsen, Rune Korsholm, Pawel Wargocki, Marcel Schweiker

Dissemination – Conferences and training weeks

Conferences

Accepted abstract at Indoor Air 2026, Singapore

Conference article presentation at CATE 2024, Seville

MuSIC training weeks

bpathak@ukaachen.de | ar.bhavya.desai@gmail.com