

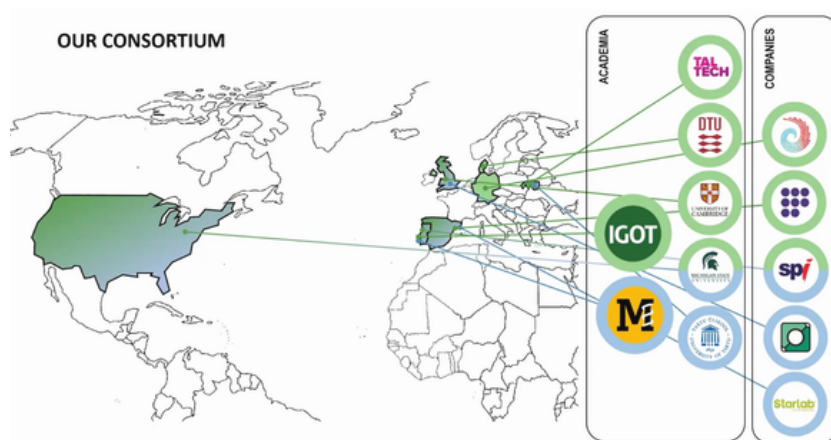
# NEWSLETTER # 5

SEPTEMBER 2023



eMOTIONAL  
Cities

Cities are places of prosperity, development, progress, creativity, and innovation, offering opportunities and conditions for people to foster healthy, successful and fulfilling lives



## 3RD ANNUAL MEETING

Cities can be places for societal stressors that severely impact people's mental health and well-being. Poorly designed cities can negatively impact people's mental health. Emotions are key drivers of our decisions; similarly, our choices are the conduit for our well-being and health.



# PRIVATE MEETING | SEPTEMBER 11TH



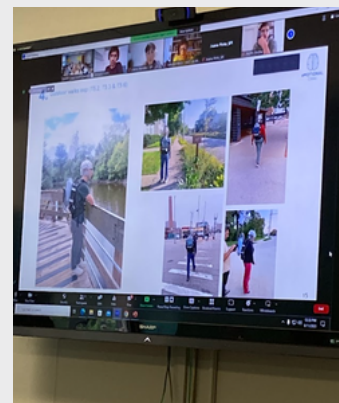
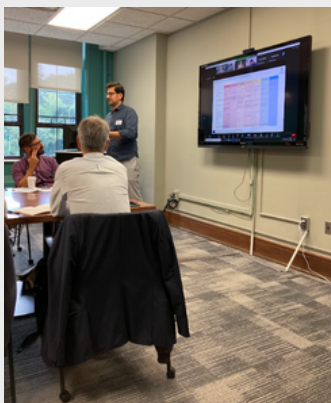
**MICHIGAN STATE**  
**UNIVERSITY**

The main goal of the event hosted by Michigan State University on September 11th & 12th was to discuss how scientists, decision-makers, politicians, urban planners and physicians, can help to shape healthier and thriving cities.

The private meeting of the eMOTIONAL Cities project was held on September 11th and hosted by Michigan State University.



All the partners had the opportunity to review the achievements of the work packages and collaborate to plan the next steps that will lead to the successful completion of the project.





# DISCUSSION ON THE FUTURE OF URBAN HEALTH | SEPTEMBER 12TH - PUBLIC EVENT

LISBON



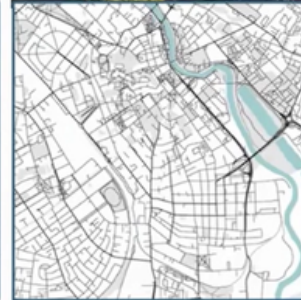
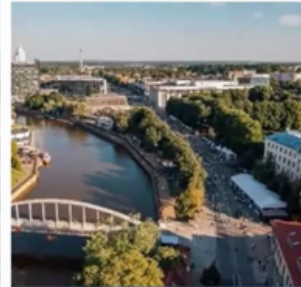
LONDON



COPENHAGEN



TARTU



LANSING



*you live in the city, and slowly, the cities starts  
living in you*

*Italo Calvin*

The public event that took place on Tuesday, 12 September, was a significant gathering of experts from various fields, including scientists, decision-makers, politicians, urban planners, and physicians. The purpose of the event was to discuss their individual and collective roles in shaping healthier and more thriving cities.

The discussion centered around topics such as improving air quality, enhancing green spaces and increasing access to well-being and healthcare. This event provided a platform for sharing insights, experiences, and recommendations on how to create cities that are not only livable, but also promote physical and mental well-being.

# NEUROSCIENCE EXPERIMENTS AT A GLANCE

## The brain as predictor of emotional urban spaces

Functional Magnetic Resonance Imaging (fMRI)

## Experiment 1



## Experiment 2

## Understanding the neuronal processing of urban space through naturalistic stimuli

Electroencephalogram (EEG)



## Mobile sensing of the stress and emotional effects of the daily urban experience

Mobility APP

## Experiment 3



## Experiment 4

## Neuroscience experiments in the open air "EMOTIONAL CITIES WALKER"

Environmental and physiological sensors



## Clinical experiences of dementia (Alzheimer's)

Virtual Reality

## Experiment 5





# PUBLIC PRESENTATIONS



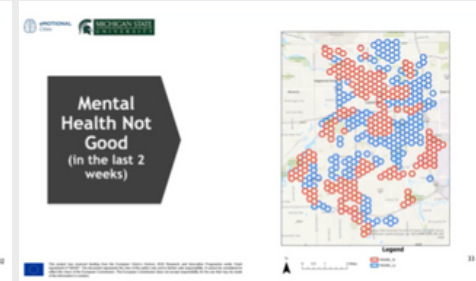
## eMOTIONAL Cities: Mapping the cities through the senses of those who make them The context



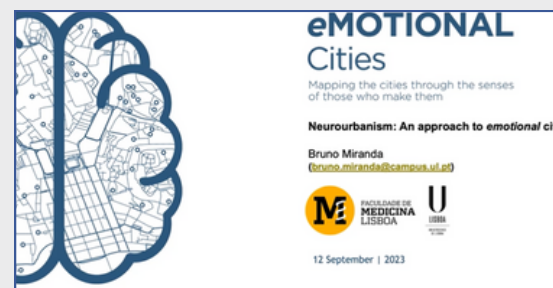
## Understanding Urban Health: Metrics, Determinants and Spaial Analysis



## Exploring Determinants of Urban Health Outcomes



## Neurourbanism: an approach to emotional cities



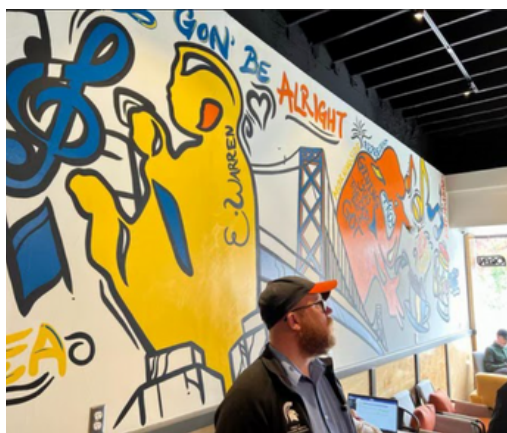
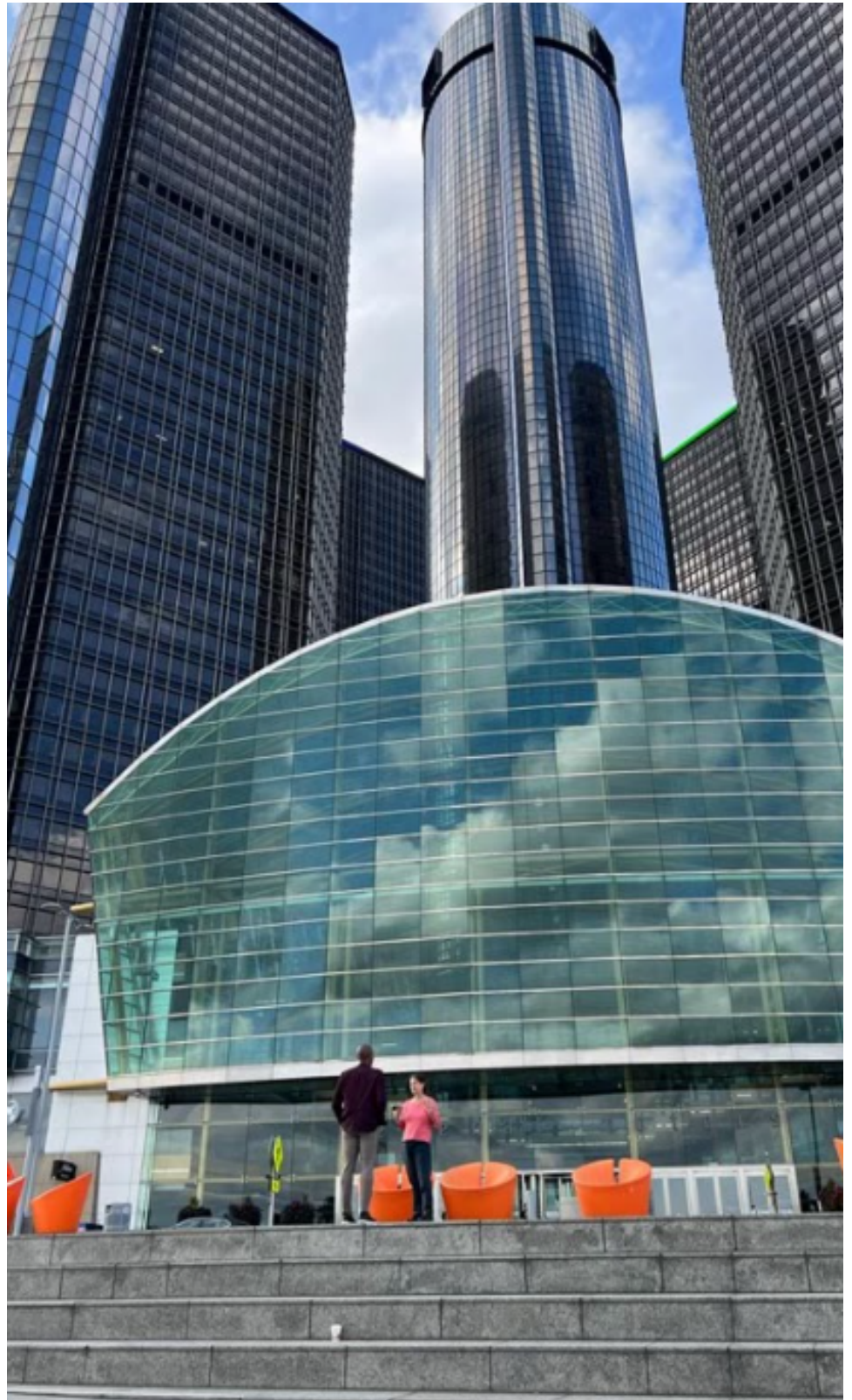
## eMOTIONAL Cities Walker





# FIELD TRIP - DETROIT | SEPTEMBER 13TH

On **September 13th**, the project partners were given a valuable opportunity to embark on a field trip to Detroit. The trip was expertly led by Darnell Adams, Director of Detroit Community Initiatives.







# SCIENTIFIC PUBLICATIONS



**The effect of transport infrastructure, congestion and reliability on mental wellbeing: a systematic review of empirical studies**

<https://doi.org/10.1080/01441647.2022.2100943>



**Serving Geospatial Data Using Modern and Legacy Standards: A Case Study from the Urban Health Domain**

<https://doi.org/10.5194/isprs-archives-XLVIII-4-W1-2022-419-2022>



**Cities and neuroscience research: A systematic literature review**

<https://doi.org/10.3389/fpsy.2022.983352>



**Health and the Urban Environment: A Bibliometric Mapping of Knowledge Structure and Trends**

<https://doi.org/10.3390/su141912320>



**Using Decision-Tree Methodologies To Explore Determinants Of Health and Wellbeing Outcomes At The Local Authority Scale - The Case Study Of London**

<https://www.ingentaconnect.com/contentone/alex/benv/2023/00000049/00000002/art00007>



**Musings on Neurourbanism, Public Space and Urban Health**

<https://doi.org/10.18055/Finis29886>



**Wearable biosensors: an agenda for digital embodied methods**

<http://dx.doi.org/10.4337/9781802200607>

# LATEST EVENTS



- VII Workshop Red Iberoamericana de Observación Territorial (RIDOT): Spatial planning in the context of climate change: opportunities for sustainable territorial development - Universidade Federal do Paraná, Curitiba, Brasil
- Webinar Air Quality in Lisbon - 18 months of continuous monitoring - Lisboa E-Nova - Energy and Environment Agency of Lisbon, Lisbon
- Data Collection for Lansing, Michigan, USA Spatial Analyses (Work Package 4). January 2023-March 2023.



- Webinar Impact investing and solving social and environmental problems - Lisboa E-Nova - Energy and Environment Agency of Lisbon, Lisbon



- Webinar Designing and Implementing Urban Health Projects: Exploring Impact Assessment Tools and Best Practices, Heart - Healthier Cities through Blue-Green Regenerative Technologies
- Open Innovation Session in the thematic area of Health, INOVA + - Rectory of the University of Lisbon, Lisbon
- RedeSAÚDE's 5th Annual Public Health Conference - «New Concepts and Tools to Promote Public Health Literacy - Rectory of the University of Lisbon, Lisbon
- Presentation «eMOTIONAL Cities - Mapping the cities through the senses of those who make them» in the Conference Urban Talks - [A]cademia, [A]utarquia e [A]telier, Lisbon School of Architecture, University of Lisbon, Lisbon



- 17th International Association for China Planning (IACP) Conference - Tianjin, China
- Presentation « Exploring Urban Determinants of Health and Wellbeing - Using Explainable Machine Learning Models»
- Workshop «Urban Climate and heat Stress», IN-Hale Project - IGOT, Lisbon
- Second Urban Health Cluster Annual Consortium Meeting - Bologna, Italy
- International Seminar «Human Rights, Demography and Development» - IGOT, Lisbon



- Organization of the LISA Lab Workshop on Spatial Analysis of Urban health with visiting professor Eric Heikkila from USC Price School of Public Policy - Cambridge, UK
- Seventh Ministerial Conference on Environment and Health Process, «European Environment and Health Process» - Budapest, Hungary
- Spatial Analyses completed for Lansing, Michigan, USA (Work Package 4). April 2023-July 2023.



- II Luso-Brazilian Meeting of Territorial Emotional Geographies in the context of climate change: opportunities for sustainable territorial development - IGOT, Lisbon
- Video Recording for Outdoor Experiments in Lansing, Michigan, USA (Work Package 5).



- Data Collection for Tartu, Estonia Spatial Analyses (Work Package 4)



# UPCOMING EVENTS



## EUROPEAN WEEK OF REGIONS AND CITIES

9 - 12 October 2023

More info [here](#)



## BRAIN INNOVATION DAYS 2023

26 - 27 October 2023

More info [here](#)



## WEBINAR GEOSPATIAL DATA

24 November 2023

More info [here](#)

## Consortium



Instituto de Geografia  
e Ordenamento do Território  
UNIVERSIDADE DE LISBOA



FACULDADE DE  
MEDICINA  
LISBOA



Climateflux



Sociedade Portuguesa de Inovação



## Coordinators



**PAULO MORGADO**

Assistant Professor at IGOT-ULisboa and a researcher at Centre of Geographical Studies, group MOPT, and at Associated Lab TERRA. Paulo is also a coordinator of GeoModLAB



**BRUNO MIRANDA**

Junior Researcher and Assistant Professor at the Faculty of Medicine University of Lisbon and Clinical Researcher at the Instituto de Medicina Molecular João Lobo Antunes