

# **Characterizing the built and physical environments of cities and their environmental and health consequences**

**Lessons from SALURBAL**

**International Conference on Urban Health 2021**

**Wednesday 7 July 2021, 14:00-15:30 EDT**



# Panel discussion overview

- **Research conducted in high income countries has documented the influence of urban built and physical environments on health outcomes, health equity, and environmental factors.**
- **However, evidence from lower income countries and the Latin America region specifically is scarce.**
- **This panel discussion will focus examine the relationships of street design, urban form, green space, and population density with a variety of health outcomes including diabetes, road traffic mortality, and homicides.**

# Agenda and speakers

- **Session overview and introduction to SALURBAL:**
  - Daniel Rodriguez, SALURBAL Principal Investigator, University of California-Berkeley, USA
- **Urban landscape and street design factors associated with road traffic mortality in Latin American cities:**
  - Alex Quistberg, SALURBAL Co-Investigator, Drexel University, USA
- **Built environment characteristics as drivers of obesity and diabetes: An analysis of adults in Latin American cities:**
  - Cecilia Anza Ramirez, SALURBAL Co-Investigator, Universidad Peruana Cayetano Heredia, Peru
- **Greenness and education inequalities in life expectancy in Latin American cities: an ecological study:**
  - Mika Moran, SALURBAL Co-Investigator, University of California-Berkeley, USA
- **Health and environmental co-benefits of city urban form: the case of Latin American cities:**
  - Ione Ávila-Palencia, SALURBAL Post-Doctoral Research Fellow, Drexel University, USA
- **Discussion and Q&A**

# THE SALURBAL PROJECT

- ***Salud Urbana en América Latina*** – Urban Health in Latin America.
- An initiative of the Urban Health Network for Latin America and the Caribbean (**LAC-Urban Health**).
- Funded through **Wellcome Trust's** “Our Planet, Our Health” global initiative.

# OUR VISION

- Create evidence base needed to make **Latin American cities** (and other cities) **healthier**, more **equitable**, and **environmentally sustainable**.
- **Engage policy makers and the public** in a new dialogue about urban health and urban sustainability and implications for societal action.
- Create a platform and network that will ensure continued **learning and translation**.

# OUR TEAM: AN INTERNATIONAL NETWORK OF COLLABORATORS

**Drexel University**, Philadelphia, Pennsylvania, USA

**National University of Lanus**, Buenos Aires, Argentina

**Federal University of Minas Gerais**, Belo Horizonte, Brazil

**Universidade de Sao Paulo**, Sao Paulo, Brazil

**Oswaldo Cruz Foundation**, Salvador Bahia, Brazil

**Oswaldo Cruz Foundation**, Rio de Janeiro, Brazil

**Universidad de Chile**, Santiago, Chile

**Pontífica Universidad Católica de Chile**, Santiago, Chile

**Universidad de los Andes**, Bogotá, Colombia

**Instituto Nacional de Salud Pública**, Mexico City, Mexico

**Universidad Peruana Cayetano Heredia**, Lima, Peru

**Institute of Nutrition of Central America and Panama (INCAP)**, Guatemala City, Guatemala

**Pan American Health Organization**, Washington, D.C., USA

**University of California at Berkeley**, Berkeley, California, USA

**Washington University in St Louis**, St Louis, Missouri, USA



# PROJECT AIMS



## AIM 1

Identify city and neighborhood drivers of health and health inequalities among and within cities

## AIM 2

Evaluate health, environmental and equity impact of policies and interventions

## AIM 3

Employ systems-thinking and simulation models to evaluate urban-health-environment links and plausible policy impacts

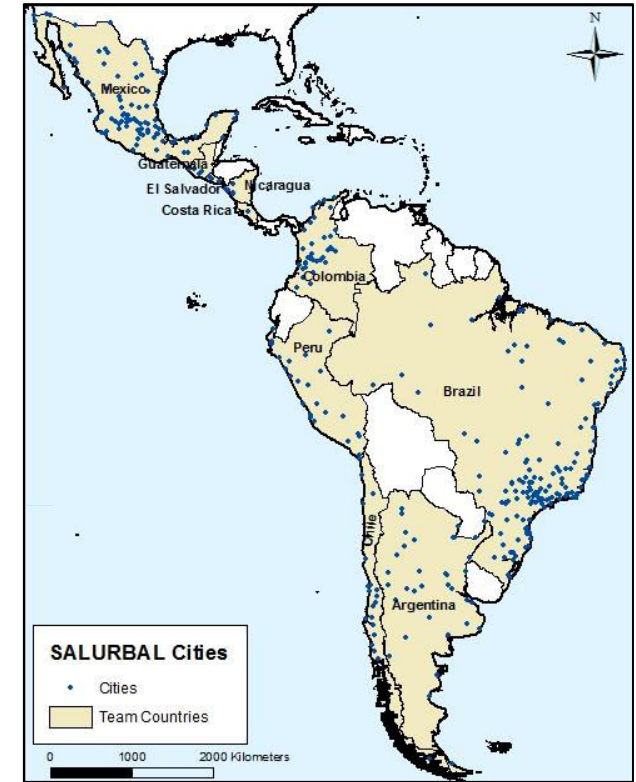
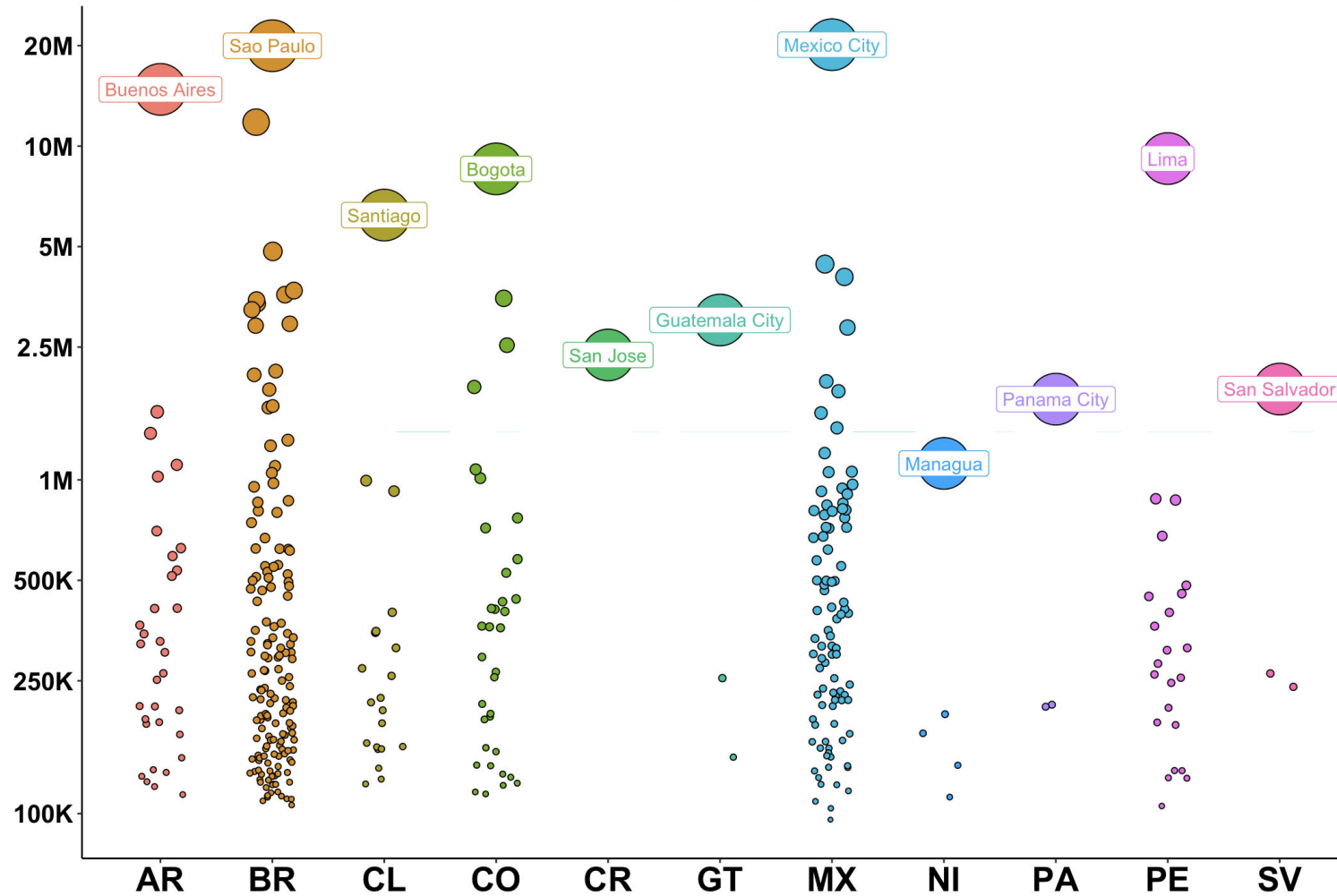
## AIM 4

Engage the scientific community, the public and policy makers to disseminate and translate findings

Lessons from Latin America about what makes cities healthier, equitable and environmentally sustainable

# AIM 1: CITY UNIVERSE

Population of 371 SALURBAL Cities (2010)



371 Urban Agglomerations with a population of  $\geq$  100,000 people by 2010



**Level 1\_AD:**  
Composed of administrative units (Level 2) with easily available data.

**Level 1\_UX:**  
Urban extent of the built-up area of a city quantitatively determined from satellite imagery.

**Level 1\_MA:**  
Follows exact country-specific definitions of urban areas.

**Level 2:** Individual administrative “subcity” units nested in Level 1\_AD (e.g., municipios or comunas). In some cases, Level 2 may be nested in Level 1\_MA.

**Level 3:** “Neighborhoods” that are small census units (e.g., setor censitario) that are nested within Level 2. May approximately be linked with Level 1\_UX.



# AIM 1: A COMPREHENSIVE DATA RESOURCE

City factors



- Economic and social structure
- Built environment
- Emissions and natural environment
- Social and behavioral environment
- Organizational/Institutional factors

Neighborhood factors



- Deprivation/Segregation
- Density/Urban form/Street network/Parks
- Particulate Matter/Temperature
- Crime, housing, work, mobility survey data
- Other resources and transportation infrastructure

Health Outcomes



- Mortality by age, sex, cause, education and ethnicity
- Self-reported/Objective survey data
- Hospital discharge data
- Cohort data from existing studies

Geocoding and data linkages

# LEARN MORE AND CONTACT US



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