

## URBAN HEALTH MAPPING: RIO DE JANEIRO



For the first time in human history most of the world's population lives in cities. This sentinel demographic shift has driven a dramatic increase in the number of individuals living in informal settlements at the heart of urban centers. These residents often bear unique health challenges resulting from improvised construction methods, limited waste disposal and municipal services, overcrowding and vehicle traffic, and even routine flooding. This changing layout of the urban landscape creates a unique opportunity to develop, modify, and improve urban environments to promote health.

Core to the Mailman School's urban health work is the idea that to maximize health and well-being, urban environments need to be designed to integrate health and sustainability solutions – solutions that are designed for the young and old, and incorporate the foundational public health principles of equity and access.

### **Rio das Pedras**

At the behest of the Mayor's Office in Rio de Janeiro, the Mailman School, in coordination with Columbia's Schools of Architecture and Engineering, is working in the **Rio das Pedras** favela to examine how interventions in urban planning, engineering, building guidelines, health promotion and other public or private investments could improve the health and well-being of its residents. Rio das Pedras is the third largest favela in Rio de Janeiro; and limited data exists to accurately describe its health risks and investment needs.

Under the leadership of Dr. Gina Lovasi, Assistant Professor of Epidemiology, and with support from the Medtronic Foundation, the project has two main objectives:

1. To characterize the health needs of the Rio das Pedras favela through a systematic mapping of local conditions relevant to the production of population health. The mapping aims to identify 'mismatches' between local resources and health indicators and identify potential cost effective solutions that can be deployed to support community health.
2. To adapt a set of methods and tools to conduct standardized and effective health assessments in informal communities and to test the feasibility of data collection approaches in these settings.

The overall project is anchored in the shared aspiration of architecture / engineering / urban design and public health professionals to ensure that cities of the future enhance health – particularly for vulnerable populations such as those living in informal communities.

As Mayor Eduardo Paes communicated to the School, the project is seen as a model for creating "the conditions for health, well-being and more effective integration of favelas into a Rio de Janeiro of the future."