

Scientific Progress

Jerusalem is a segmented city comprised of different 'cities' associated with specific religions and streams, which overlap spatially to a degree. Prof. Galit Cohen Blankshtain's (head of the Federmann School of Public Policy and Governance and a faculty member at the Geography Department) research areas include transportation policy, participation patterns in policy process, and environmental public engagement. Together with Prof. Eran Feitelson from the Department of Geography, Prof. Blankshtain published a paper on public transport planning in a spatially segmented city, focusing on Jerusalem as a case study.

Smart Urban Trees: Monitoring and improving tree and root performance on city streets is a project led by Prof. José Grünzweig and Dr. Nimrod Schwartz (Faculty of Agriculture, Food and Environment). The project, funded by the Center for Sustainability, aims to develop a digital application for mapping and monitoring urban trees and their root systems, with the goal of supporting healthy tree growth in cities. The study will focus on how the success of urban tree growth correlates with below-surface conditions. It will examine relationships between physical and chemical properties of the soil pit and the functioning of the root system, often the first to be damaged.

The new City Innovation Center led by Prof. Noam Shoval (Department of Geography) is trying to answer big questions on urban issues using data processing and advanced technological capabilities, creating collaborations with public and private sectors. The center promotes research and development on issues of transportation, climate, public policy, security in the public sphere, tourism, and more.

Community Impact

"Meorav Yerushalmi" is a citizen science project developed by HUJI's Center for Sustainability and the Bloomfield Science Museum with the aim of addressing the climate crisis in Jerusalem's urban environment. The project, partnering academia, community, government and the private sector, aims to encourage academic-civilian involvement in monitoring reliable environmental data at high resolutions and designing data-based, change-generating solutions within the action plans of decision-makers. The project uses mobile sensor kits combined with cellphones and software for data collection, analysis, presentation, and mapping to yield operative recommendations. It places emphasis on implementing shading and cooling solutions for urban space, reducing the urban heat island effect, encouraging walkability, reducing air pollution, and reducing greenhouse gas emissions. The Urban Clinic at the Department of Geography strives to nurture urban leadership and local knowledge for just and inclusive cities. Home to the creation of local knowledge about spatial justice and the growth of professional and civic cooperation, the clinic includes researchers, city professionals, and social activists, and offers courses, tours, publications, and various projects. Among other topics, the clinic, centered in Jerusalem, focuses on placemaking, community planning, and urban renewal.

Studies and Learning Initiatives

HUJI's Institute of Urban and Regional Studies, together with the Department of Geography, offers a leading graduate program in Urban Planning, providing a comprehensive curriculum in the theory, practice, and methods of urban planning. The program aims to train committed and proficient planning professionals, and equip them with a broad knowledge of planning theories and techniques that will serve them in their work in urban planning and policy research. The graduate program balances objectives of sustainable and equitable patterns of development with local economic growth.

Smart Cities and Urban Informatics is a unique, 1-year international MA designed to equip a new generation of urbanists (planners, analysts, and policy makers) with the optimal toolbox for addressing the development of the Smart City. This includes hands-on analytical skills and critical tools for tackling current and anticipated future challenges posed by Smart Cities. Dr. Orit Gazit of the Department of International Relations teaches a course on "Community Building - An infrastructure for development," which explores the sociological, cultural, and political meanings of community and community building.

Action on Campus

Among other benefits, electric public transportation reduces air pollution, improves road congestion, and provides an equitable transportation system. The main electric public transportation system operating in Jerusalem is the Light Rail, with a current length of 14 km and plans for expansion to over 70 km. HUJI is involved in these plans, to the extent that all three campuses in Jerusalem are slated to be connected to the Light Rail lines (Mount Scopus, Givat Ram, and Ein Kerem).