## Anna Sunding, Swedish University of Agricultural Sciences, Sweden

**Presentation title:** Descriptions of the relationship between human health and green infrastructure in Nordic comprehensive plans

The link between green space and human health and well-being (HH&W) is wellestablished (WHO, 2016), with urban green infrastructure (GI) presenting the opportunity to tackle human health related challenges (Tzoulas et al., 2007). While land use planning is fundamental for delivering increased and equitable HH&W outcomes (Sallis et al., 2016), whether and to what extent this is implemented in planning practice is largely unknown. With the aim of identifying the conditions set for developing healthpromoting green infrastructure in strategic planning interventions, the comprehensive plans of six Nordic municipalities were studied with respect to terminology and goals used to describe the GI-HH&W relationship. The document content analysis was based on an adaptation of the causal model of the impacts of urban green spaces on health and well-being presented by WHO (2017). The results revealed common, varied, and nuanced terminology describing properties and functions of GI in all six plans. However, the effect of these aspects on humans and subsequent health outcomes were nonspecifically described and less consistently referred to in the plans. Similarly, connections between GI properties and HH&W outcomes were rarely mentioned and expressed only in general terms. Goals relating to the GI-HH&W relationship were listed in five of the six plans, but tended to be more generally stated, while specific information was provided on GI and HH&W. All plans contained an abundance of information relevant to HH&W outcomes, but described activities in, or effects of, GI less explicitly from a human health perspective. This general lack of nuance in the way HH&W is described in Nordic comprehensive plans may lead to uncertainty concerning (i) the land claims required and (ii) how allocated land should be configured in order to promote HH&W via GI. Overall, current descriptions fail to acknowledge that health outcomes vary with the properties and functions provided by green spaces, and may thus fail to provide sufficient arguments to withstand other strong land use interests. From a strategic planning perspective, the general, overarching description of the GIHH&W relationship in comprehensive plans may create additional uncertainties for prioritization in subsequent planning phases.

**Keywords:** Green infrastructure, Human health and well-being, Land use planning, Greenspace planning and policy, Comprehensive plans

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## Marta De Marchi. Iuav University of Venice, Italy.

**Presentation title:** Healthy urban food. The nexus between public health, food systems and city-region governance

Food is a territorial system closely linked to public health, social equity and land policy. Firstly, eating habits are at the root of opposing effects, from the incidence of cardiovascular diseases to the phenomena of malnutrition. Moreover, the food system also has indirect impacts on the health of citizens all along its supply chains: pollution of air, water and soil as well as production of considerable quantities of waste. Secondly, food and its development along the value chain often entail social inequity: not only in terms of food injustice, resulting from a difficult accessibility to healthy and fresh food, but also in terms of power disparity among actors at the interface between the different stages of the value chain. Thirdly, food is acquiring, directly and indirectly, ever greater relevance in the tools of territorial government: programmes to reorient agricultural production models, rules and commercial agreements of the free market, objectives relating to land consumption, waste management and recycling. In particular, the European Union is recognising food-related issues as urgent urban themes and, in addition to the Common Agricultural Policy, in recent years it has promoted further programmes to make the food system more compatible with the environment, more resilient to climate change and more equitable in relations between actors and between territories. Against this background, the Cities2030 project is being developed, financed by the European Horizon 2020 programme, which brings together 40 European partners involved in various ways in the food system. The main objective of the project is to develop, in the 8 cities and 2 regions that are case studies, new food policies capable of reorienting existing systems towards more sustainable, resilient and fair models. The methodology agreed upon by the partners envisages the involvement of all interest groups and actors of the food system arena, through the installation of urban Policy and Living Labs. These City Region Food System Labs (CRFS Labs) will have, during the funding period, to work on the construction of new urban policies and pilot projects able to activate innovation processes in the food system of reference. The Italian universities Ca' Foscari and Iuav, both based in Venice, are involved in the development of two CRFS Labs in the Veneto region: one in the city of Vicenza, the other in the Venice lagoon. Working in these two cases will make it possible to reflect on very different food systems, even though they are geographically close: Vicenza, traditionally dedicated to the production of fodder and meat, with a significant food manufacturing sector; Venice, characterised by the consumption and production related to water, with small agricultural producers on the islands. The paper will propose some methodological reflections initiated by luav, framing the first results of Cities2030 in the light of the nexus between society, health and governance.

Keywords: Food system, Europe, Horizon2020, living lab, policy lab, governance innovation

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## Jeanne C. Versari Ferreira Sapata. Instituto dos Arquitetos do Brasil-Maringá-Paraná State; Faculty of Architecture and Urbanism of the University of São Paulo, Brazil.

**Presentation title:** CREATING A HOUSING DIAGNOSIS INSTRUMENT INTEGRATED WITH THE COMMUNITY HEALTH AGENTS PROGRAM IN BRAZIL

The relationship between public health, housing conditions and quality of life has become even more evident in the last two years around the world. Integrating health in urban and territorial planning is important not only to find indicators, but to ensure sustainable urban development (UN-HABITAT; WHO, 2020). This paper aims to present the first results of an ongoing project for the construction of a housing diagnosis instrument with the action of community health agents in Brazil. This project is being developed by the Instituto dos Arquitetos do Brasil of Maringá, Paraná State. Institutional and financial support for the project is provided by the Conselho de Arquitetura e Urbanismo do Brasil (CAU-BR). The methodology underlying the elaboration of this instrument is supported by research carried out by Fundação João Pinheiro (FJP), which has periodically analyzed the quantitative and qualitative housing deficit in Brazil since 1995. The initial application of this instrument will be carried out in a case study in the city of Maringá, where community health agents will be trained to apply a questionnaire that will survey the housing conditions of the population. The current housing diagnoses in Brazil are based on statistical data, with information from the Demographic Censuses carried out by the Instituto Brasileiro de Geografia e Estatística (IBGE). However, these diagnoses are rare and do not reflect the housing reality in the country. The development of this instrument has as main objective to obtain territorialized data on the inadequacies of housing at a local scale to subsidize the correct application of resources in housing improvements in Brazilian municipalities. This diagnostic and urban planning instrument can be incorporated into the capillary system of the Sistema Único de Saúde (SUS) in Brazil, covering 63.62% of Brazilian population served by the Estratégia Saúde da Família (MINISTÉRIO DA SAÚDE, 2021). The currently information collected in SUS electronic forms by health agents is not sufficient to guide specific housing policies, such as: identification of families in cohabitation, inadequate water storage, inadequate coverage, lack of an exclusive health unit, excessive rent burden, accessibility for people with disability and elderly etc.

**Keywords:** housing diagnosis; urban planning instrument; community health agents; intersectoral planning; qualitative housing deficit

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