



Science & Technology

FORESIGHT

from society to research

SmartGrid Document

“SmartGrid for Urban Food System:
An Innovative Approach to Connect Nutritional,
Environmental, and Social Needs”

13 November, 2018 - Washington, DC

WG FOOD



GEORGETOWN UNIVERSITY

Italian Research Institute
Georgetown College

SmartGrid for Urban Food Systems: An Innovative Approach to Connect Nutritional, Environmental, and Social Needs

FEATURING



Dr. Cecilia Bartolucci
National Research Council of Italy
Rome, Italy



Dr. Antonio Logrieco
Director of Institute Sciences of
Food Production National
Research Council of Italy



Dr. Yuki Kato
Associate Teaching Professor
Department of Sociology
Georgetown University

Moderator

Dr. Giorgio Einaudi
Scientific Director of the S&T Foresight Project
The National Research Council of Italy

Tuesday, November 13, 2018
Intercultural Center Auditorium
Georgetown University
3700 O Street NW
Washington, DC, 20002

Program

Welcome	Sara Hager, Ph.D. <i>Director, Italian Research Institute Georgetown College</i>
Remarks	Professor Ugo Della Croce <i>Science Attaché. Embassy of Italy in the USA</i>
Moderator	Dr. Giorgio Einaudi <i>Scientific Director of the S&T Foresight Project, The National Research Council of Italy</i>

Speakers

Dr. Cecilia Bartolucci

National Research Council of Italy
Rome, Italy

*"A Disruptive System Approach to Address an Upcoming System Challenge:
SmartGrid for Urban Food Systems"*

Dr. Antonio F. Logrieco

Director of the Institute of Sciences of Food Production
National Research Council of Italy

*"The Urban Food System in Bari Metropolitan Area: a Food Science
Perspective"*

Dr. Yuki Kato

Associate Teaching Professor
Department of Sociology
Georgetown University

*"Alternative Food or Food Justice?: Current American Discourse on Food,
Environment, Culture, and Equity"*

Abstracts

Dr. Cecilia Bartolucci

*"A Disruptive System Approach to Address an Upcoming System Challenge:
SmartGrid for Urban Food Systems"*

According to the UN by 2050 approximately 66% of the population will be living in urban areas, creating new important challenges. It is in fact known that urbanization enhances nutrition transition (the dietary changes and their nutrition impacts), resulting in a higher risk of food insecurity and unhealthy diets. Furthermore, urban food markets already consume up to 70% of the food supply; cities consume over 75% of the world's resource; and a growing divide between peri-urban agricultural producers and urban consumers increases the mismatch between production/supply and needs encouraging lack of traceability as well as lack of food safety. To address these challenges, we propose a holistic system approach, supporting a new model developed in analogy to the smart grid for electricity. The SmartGrid will be a dynamic, adaptable network supported by integrated technologies, ICT tools and equipment. It will be driven by conscious societal, environmental and economic needs and will connect people, data and values in order to make the agri-food production and distribution within Urban Food Systems more sustainable, resilient, secure, and competitive. It will empower agri-food chains key actors, from farmers to consumers, through co-design and communication tools, which will support that acquired knowledge and data will translate into actionable information and skills.

Dr. Antonio F. Logrieco

*"The Urban Food System in Bari Metropolitan Area: a Food Science
Perspective"*

The study of the urban food system of the city of Bari, the regional capital of Apulia, requires extending the geographical boundaries to the metropolitan area of Bari, including the 41 minor cities, which are part of the innovative administrative concept of the "Metropolitan city of Bari." In fact, the characteristics of this territory, in terms of population, society, culture, and the peculiarities of this food system, cannot be fully understood without considering the close relationship existing between the city of Bari and the surrounding territory. Bari is one of 176 signatory cities of the Milan Urban Food Policy Pact. Seeking coherence between the city's needs and the nearby rural food production, promoting and strengthening urban and peri-urban food production, and supporting short food chains are key-points to understanding the direction towards which the urban food system of this city is moving. The food production in the area is strongly influenced by the tradition of the Mediterranean diet, and the productive potentialities of the territory, if correctly managed, could support short supply chains and provide healthy and diversified food to the local communities. Under a food science perspective, beside the constant improvement of food quality (in terms of nutritional value and food safety), a big challenge for the scientific community and the local productive system is to guarantee the traceability and to increase sustainability, by improving the resources use efficiency, minimizing pollution and protecting agro-biodiversity.

Abstracts

Dr. Yuki Kato

“Alternative Food or Food Justice?: Current American Discourse on Food, Environment, Culture, and Equity”

American consumers have become increasingly aware of the challenges of the dominant industrial food production and distribution system over the last decade, from its impact on environment, animal welfare, to human health. As a result, support for farmers' market and other forms of local food production system, also known as alternative food network (AFN), has expanded significantly over the years. Conventional grocery stores and national chain restaurants have also begun incorporating local food into their menu, thus consumers now have wider options for supporting small-scale growers in their region without having to rely on alternative food outlets such as co-ops or community-supported agriculture programs. These alternative food production and supply chains are becoming more organized, to create more efficient and economically sustainable model of regional distribution for the products, an effort USDA encourages through its food hubs initiatives. Meanwhile, food justice activists have raised concerns for the capitalistic framework under which the AFN has come to be valorized and popularized, critiquing its notable lack of focus on equity and justice. The emerging AFN model does not make healthy and good food accessible to all, and it leaves out the concerns for the labor conditions of farm workers and wage workers in food retails. Moreover, it does not reflect on the inherent power dynamics that dictate who gets to steer the food movements for what outcomes. Food justice discourse, therefore, illuminates the limitation of the AFN and highlights aspects of the American food system that are often overlooked in the common narratives in the public and policy discourse about how to solve it.