

SCRIPS Workshop

Supply Chain Resilience Issues, Problems and Solutions for the Homeland Security Enterprise

Research Keynote: “Supply Chain Resilience Research: Insights from Agricultural & Food Supply Chains”

Anna Nagurney

Eugene M. Isenberg Chair in Integrative Studies; PhD Coordinator in Management Science; Director, Virtual Center for Supernetworks Operations & Information Management

Anna Nagurney is a renowned expert in supply chain network systems, holding the Eugene M. Isenberg Chair in Integrative Studies at the Isenberg School of Management, University of Massachusetts. She is also the Director of the Virtual Center for Supernetworks, where her work spans various domains, with a core focus on transportation, logistics, and supply chain networks. Her extensive research addresses the complexities of global supply chains, covering areas such as healthcare, food distribution, and the challenges of labor availability, sustainability, and resilience.

Her knowledge of supply chains was particularly impactful during the COVID-19 pandemic, when she developed novel optimization and game theory models to address critical issues in vaccine distribution, healthcare capacity planning, and personal protective equipment (PPE) logistics. In 2021, she presented her findings at the CAO E Seminar Series in a talk titled "Operations Research for COVID-19: Novel Supply Chain Network Models Inspired by the COVID-19 Pandemic – From Optimization to Game Theory." This research provided key insights into the fierce global competition for medical supplies and influenced policy and decision-makers during the crisis.

Nagurney's expertise in network systems also extends to financial, economic, and social networks, and their integration with the Internet. She has received numerous awards, including the Constantin Caratheodory Prize (2019), the Harold Larnder Prize (2020), and the University Medal from the University of Catania in Italy (2014). Her contributions to the field have been recognized by her election as a Fellow of the Regional Science Association International (RSAI), INFORMS, and the Network Science Society.

A twice-awarded Fulbright Scholar, Nagurney has also served as a Visiting Fellow at MIT, Brown University, and the Radcliffe Institute for Advanced Study at Harvard University. She has organized and co-organized several international conferences on topics related to humanitarian logistics and disaster relief. Her work has been supported by major organizations, including the AT&T Foundation, the Rockefeller Foundation, and the National Science Foundation, where she has served as a Co-PI on key supply chain network research initiatives.

