Session 1C:
Fire Growth in Getting Faster: How Can the Fire Service Respond?

Fire growth in the modern environment is evolving faster than most fire service tactics were ever designed to handle. From energy-dense materials to the widespread use of lithium-ion batteries, today's fires burn hotter, spread faster, and produce complex hazards that challenge even the most experienced firefighters.

This course bridges the laboratory and the fireground — taught through the combined perspectives of Nate Sauer, a fire research engineer with UL's Fire Safety Research Institute (FSRI), and Fire Captain Sean Gray, an active company officer. Together, they connect real-world fireground experience with scientific data to help firefighters understand why fire growth has accelerated and how the fire service can respond more effectively.

Participants will gain insight into how lithium-ion battery failures and other modern fuel sources alter fire dynamics, how UL FSRI research translates into tactical decisions, and how firefighters can adjust size-up, water application, and ventilation coordination to stay ahead of rapidly changing conditions

Sean Gray
Cobb County Fire

Sean Gray is currently assigned as a Truck Captain in Cobb County, GA. He started in the fire service in 1993. His work and dedication to research-based tactics have enabled him to co-author a book, The Evolving Fireground, and write numerous articles for Fire Engineering magazine. He is a Lead HOT Instructor at FDIC and serves on multiple NFPA and UL FSRI committees, representing the fire service.