Forensic Science Seminar Series

Wednesday, November 28, 2018  1PM–2PM
CP 320 or via web conference

For more information, visit ifri.fiu.edu or email ifri@fiu.edu.

To attend via webinar, go to go.fiu.edu/Fire Investigation

Fire Investigation: Science or “Art?”

Mr. John Lentini, CFI, D-ABC

Fire investigation began as a mixture of art and science. Gradually, it has migrated to a scientific endeavor, but many practitioners had to be dragged, kicking and screaming into the 21st century. In the late 1970s, fire investigation (formerly arson investigation) was riddled with myths and misconceptions. NFPA 921, Guide for Fire and Explosion Investigations, first published in 1992, brought standards to the discipline.

The goal has been to excise the myths, and to persuade practitioners (largely nonscientists) that it was possible for the floor inside a structure to burn even with no accelerants on the surface. By 2000, most practitioners accepted this theory. Since 2000, the focus has turned toward the behavior of fire to help us understand how to determine where it started. It turns out origin determination, a fire investigators “core competency,” is subject to huge uncertainties once a fire has burned more than three minutes in a fully involved condition.

Fire investigation science today is an understanding of the role of ventilation in the production of fire patterns. Fire does not seek oxygen, but it will not burn where there is none. This realization, understood by the larger fire investigation community only in the last 10 years, is driving the forces of progress. Join us as we discuss the evolution and future of fire investigation.

John Lentini began his forensic science career with the Georgia Bureau of Investigation Crime Laboratory in 1974. For 28 years he was the lead fire investigator for Applied Technical Services of Marietta, Georgia. He is one of a handful of people on the planet certified to conduct both fire scene investigations and fire debris analysis. He has personally conducted more than 2,000 fire scene inspections and as an expert witness on more than 200 occasions. Mr. Lentini is an active proponent of standards, and has made many presentations on the proper use of science in fire investigations. He spoke during the National Academy of Science hearing resulting in the 2009 report, Strengthening Forensic Science in the United States: A Path Forward. He served on the National Fire Protection Association (NFPA) Technical Committee on Fire Investigations, which writes NFPA 921, for 22 years, and many other committees and associations. His book, Scientific Protocols for Fire Investigation (2018), is available at www.firescientist.com.