Presentation Title	Place in Schedule
Examining Cancer Burden in the Fire Service: Evidence from the Sylvester Firefighter Cancer Initiative	Concurrent Session 3.3 *Day 2 – Wednesday* *May 9th, 2018* *4:00 – 5:15pm*
Description of Presentation	**Presenter Name(s) And Credentials**
Firefighters serve in a hazardous occupation and face unique chemical and physical exposures. Recent epidemiologic studies have found an elevated risk for site-specific cancers (i.e., respiratory, digestive, and urinary systems) among firefighters compared to the general population. Firefighter exposure studies have detected carcinogenic chemicals on firefighter skin and gear following fire-incident response. There is limited research on individual firefighter risk factors and fire service organizational hazards related to cancer that could inform workplace interventions using a Total Worker Health (TWH) approach. Established in 2015, the Sylvester Firefighter Cancer Initiative, comprised of 11 collaborative research and service projects in the State of Florida, examines firefighters' exposure to carcinogens, their risks for developing cancer, and methods of education for prevention, screening, and early detection. In this multipresenter concurrent symposia, five major FCI projects designed with a TWH framework will be presented, including fire service cancer surveillance, measurement of fire station and incident response exposures, firefighter safety and cancer screening behavior, tumor bank integrated with occupational exposure, and characterization of fire service policies and programs. Initially a brief overview of the FCI and its mapping to the TWH approach will be described. Using epidemiologic data collected through an annual survey of Florida firefighters (n=3,842), we are documenting cancer risk specific to active combat and volunteer Florida firefighters, including surveillance of retired firefighters through the AERIAL (Advancing Epidemiology of Retired fIrefighters Aging Longitudinally) project. The FCI's environmental sampling team is monitoring carcinogens and hazardous compounds off-gassing in firefighter turnout	Alberto J. Caban-Martinez, DO, PhD, MPH *University of Miami, Miller School of Medicine* Erin N. Kobetz, PhD, MPH *University of Miami, Miller School of Medicine* David J. Lee, PhD *University of Miami, Miller School of Medicine* Natasha Schaefer Solle, RN, PhD *University of Miami, Miller School of Medicine* Katerina M. Santiago, MPH *University of Miami, Miller School of Medicine*

gear, and characterizing fire station carcinogenic exposures. The State cancer registry linkage project links Fire Marshal certification records to Florida Cancer Data System records to identify cancers disproportionately impacting Florida firefighters. The cancer screening project provides colorectal and cervical cancer screening to eligible active firefighters with the implementation of home-based screening tools. The health communication project, using mixed-methods, documented firefighter culture, work, and knowledge about cancer yielding tailored education and behavior change campaign materials. Lastly, the unique tumor bank repository integrated occupational exposure data to deposited firefighter tumor samples to support research into the molecular mechanisms of cancer cells. Through unique fire service and union partnership, the FCI investigates how characteristics of the fire station, including organizational, environmental, and behavioral factors, may influence firefighter health and safety. This work will help inform future Total Worker Health interventions aimed at reducing cancer-related risk factors at the fire station.	