



Keystone Science Lecture Seminar Series Presents:

Applied Research and Industry Sector Gap-Analysis to Inform Worker Training Program on Highly Infectious Diseases

October 18, 2017

Background: Since 2009, our research group has been conducting applied research studies to determine policies, procedures, and methodologies for the Nebraska Biocontainment Unit to effectively protect those involved in the treatment of patients with highly infectious diseases. Taking an all-encompassing approach to various industry sectors that would be involved throughout the disease life cycle, this research included workers in healthcare, law enforcement, emergency medical services, industrial hygiene, environmental services, waste handling, the death care sector, and others. During the 2014-2016 Ebola outbreak, more high-level isolation facilities were created, and began to either adapt policies and procedures of the small number of existing biocontainment facilities, or began to develop their own. From 2015-2017, our research group conducted a series of surveys to determine how these facilities, and the adjacent industrial sectors were addressing this challenge. These included identifying knowledge and training gaps among workers within the facilities including, the death care, aircraft rescue and firefighting, emergency medical services, and waste management sectors. The results of our previous applied research, experience in the active treatment and monitoring of those with Ebola virus disease, and the results of our knowledge and training gap assessments were then utilized to develop and continually improve the training program and materials that we developed for our National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP) Ebola Biosafety and Infectious Disease Response Training program grant titled, the Biosafety and Infectious Disease Training Initiative (BIDTI). BIDTI is a consortium of Indiana University School of Public Health, Nebraska Biocontainment Unit at the University of Nebraska Medical Center, University of Texas Health Science Center at Houston (UTHealth) School of Public Health, Harvard T.H. Chan School of Public Health, and Dillard University.

Presented by: Shawn Gibbs, Ph.D., Professor of Environmental and Occupational Health, Executive Associate Dean for Academic Affairs, Indiana University Bloomington School of Public Health

Shawn Gibbs, PhD, MBA, CIH is Executive Associate Dean, Interim Associate Dean for Research, and Professor with the Indiana University School of Public Health-Bloomington. Shawn has over one hundred peer reviewed papers in industrial hygiene and environmental exposure assessment, focusing on environmental microbiology and disrupting transmission of highly infectious diseases. He was a 2006 U.S. Faculty Fulbright Scholar to Egypt, and has been PI of three Public Health Fulbright Junior Faculty Development Programs (Egypt and Libya). His research has helped to determine national policies, procedure, and best practices to treat patients with Ebola virus disease and other highly infectious diseases; including patient transportation, waste handling/disposal, patient discharge, patient remains, PPE donning and doffing, decontamination, etc. Shawn previously had leadership roles in several organizations and centers, such as the Nebraska Biocontainment Unit, and helped in the development of the National Ebola Training and Education Center, funded by US DHHS. Shawn is co-PI of the Biosafety and Infectious Disease Training Initiative, a NIEHS funded consortium.