An illustrious researcher in the field of infectious disease epidemiology was the guest speaker at the inaugural Clinical and Translational Science Institute 2017 Seminar Series on Feb. 10 in Farber Hall on UB’s South Campus. A standing-room-only crowd in the 105-seat lecture hall welcomed Arnold S. Monto, MD, to town for the seminar, co-sponsored by the UB School of Public Health and Health Professions and the CTSI.

Monto is the Thomas Francis Jr. Collegiate Professor in the Department of Epidemiology at the University of Michigan School of Public Health, where he has conducted research into the occurrence, etiology and prevention of infectious diseases, nationally and globally, since 1965. Monto was instrumental in establishing the theory of “community immunity” thanks to a ground-breaking 1968 study. Nearly 85 percent of schoolchildren in a Michigan town were vaccinated, leading to a profound decrease in flu cases among all age groups. Vaccine firewalls continue to be a part of strategies to control influenza and other infectious diseases worldwide.

His most intensive scholarly focus has been on the epidemiology of influenza, in particular vaccine strategies to prevent seasonal and pandemic flu, which was the topic of his talk in Buffalo. Tracing a body of work in the area of influenza vaccines stretching back to 1943, Monto described the current constitution of the FDA- and WHO-recommended seasonal flu vaccine and the rationale behind its bi-annual reformulation (once in the fall for the northern hemisphere and again in the spring for the southern hemisphere). Monto outlined the challenges associated with not only predicting and targeting the rapidly mutating strains of the virus, but also tracking the effectiveness of the yearly vaccines. He also discussed the history of research into live attenuated vaccines, versus the inactivated vaccines currently in usage, and the prospects for a “universal,” one-shot, permanent influenza vaccine - which, he said, appears increasingly remote.

The next speaker in the CTSI series will be Peggy Compton, PhD, RN, associate professor in the
University of Pennsylvania School of Nursing Department of Family and Community Health, on Friday, March 31, at 8:30 a.m. in 403 Hayes Hall on the UB South Campus. Her research explores pain, opioid addiction and the phenomenology of addiction, and she is clinically expert in detecting opiate abuse. Co-sponsored by the CTSI and the UB School of Nursing, the title of Compton’s seminar is “Translational Research in Opioid Use Disorder and Chronic Pain.”