



SOKA UNIVERSITY OFFICE OF ACADEMIC AFFAIRS PRESENTS

Disease and Disease Control in Eras of Globalization Conference

Friday | Sept 22 | 4:45 - 7:00 PM
Saturday | Sept 23 | 9 AM - 1 PM
Soka University of America Athenaeum

John Lesch: *Four Turning Points in the Treatment of HIV/AIDS*

Abstract

Fifteen years elapsed between recognition in 1981 of the first cases of what came to be known as AIDS and the appearance of the first highly effective combination drug treatments for HIV infection in 1996. Between these dates four major turning points may be discerned in the development of drug therapy. These are: the engagement of researchers; recognition of a path to rational drug design; prevention and control of opportunistic infections; and identification of combination drug therapies that would allow conversion of HIV infection to a chronic condition. In each instance researchers and clinicians drew in important ways on research programs, knowledge, and practices previously unrelated to HIV/AIDS. Cancer research proved to be a key resource for the earliest researchers seeking AIDS treatments. AZT, the first antiretroviral to gain FDA approval, came out of a decades-long research program based on the antimetabolite concept. Doctors treated, or tried to prevent, infections associated with AIDS with drugs originally developed to treat herpes, tuberculosis, or other viral or bacterial infections. Those who developed the drug combinations that proved successful in the mid-1990s and after looked to the examples of earlier combination therapies for tuberculosis and cancer. Without the specific knowledge and experience provided by prior research and drug development, neither the presence of a powerful network of academic, government, and pharmaceutical industry institutions, nor the pressure of a rising AIDS activist movement, would have been sufficient to produce effective drug therapy for HIV/AIDS in the first decade and a half of the epidemic.