Information Technology Applications for Infectious Diseases and Antibiotic Usage.: Implications for a Broader Scope of Education.

Victor L Yu, U Pittsburgh, Pittsburgh, PA, USA

www.antimicrobe.org is an Internet-based database that focuses on Infectious Diseases with emphasis on antimicrobial agent therapy. Four databases form the core of the website: microbes, antimicrobial agents, HIV, syndromes (empiric antibiotic therapy). Over 400 international authorities contribute to the databases. Given the magnitude of the databases, a Smart Search allows rapid searches of a specific topic; artificial intelligence techniques are

applied, rather than keyword searches.   In today's rapidly-changing world, new antimicrobial agents and emergence of resistance make paper textbooks obsolete. A Guided PubMed Search allows retrieval of pertinent articles which have been published after the latest update of the chapter . Embedded links allow presentation of information on pathogenesis, history of medicine, clinical pearls, and review articles to the busy clinician when he/she uses www.antimicrobe for needed, up-to-date information on management. Moreover, customized

information on antibiotic use that is specific and conforms to the antibiotic policies policy of an individual hospital can be targeted for physicians at the hospital where they practice.

IT allows delivery of educational information on a wide variety of topics to be readily available to the clinician at the point-of-use and he/she has the option of viewing this information immediately or not at all.   The information can be stratified by granularity so that medical students and seasoned clinicians can view the information most pertinent to their level of training.   Free passwords for access to www.antimicrobe.org will be distributed to the audience.