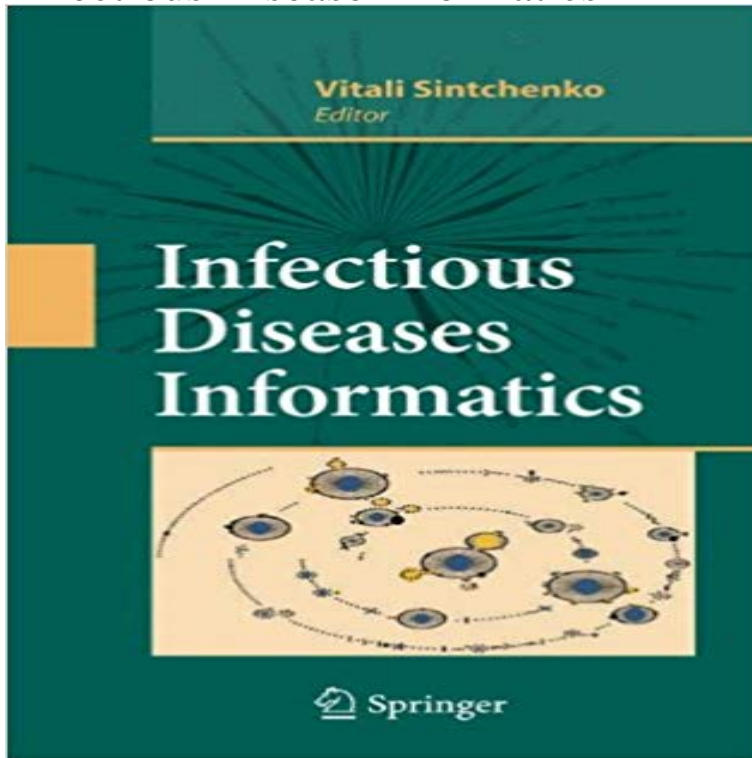


Infectious Disease Informatics



There are several reasons to be interested in infectious disease informatics. First, it is of practical significance to understand how the technology revolution has been reshaping infectious disease research and management, as rapid advances in genomics-associated technologies have changed the very nature of the questions we can ask. Second, the emerging evidence has confirmed that the application of information technologies in healthcare enhances our ability to deal with infectious diseases. Finally, the implementation of electronic health records has created new and exciting opportunities for secure, reliable and ethically sound clinical decision support and biosurveillance guided by the genomics of pathogens with epidemic potential. This volume addresses the growing need for the critical overview of recent developments in microbial genomics and biomedical informatics relevant to the control of infectious diseases. This field is rapidly expanding, and attracts a wide audience of clinicians, public health professionals, biomedical researchers and computer scientists who are fascinated by the complex puzzle of infectious disease. This book takes a multidisciplinary approach with a calculated move away from the traditional health informatics topics of computerized protocols for antibiotic prescribing and pathology testing. Instead authors invite you to explore the emerging frontiers of bioinformatics-guided pathogen profiling, the system microbiology-enabled intelligent design of new drugs and vaccines, and new ways of real-time biosurveillance and hospital infection control. Throughout the book, references are made to different products supplied by public sources and commercial vendors, but this is not an endorsement of these products or vendors.

Request PDF on ResearchGate On Apr 30, 2012, David Buckeridge and others published Infectious Disease Informatics: Syndromic Infectious disease informatics has been defined as a new field that studies knowledge creation, sharing, modeling and management in the domain of infectious Chapter Overview. Infectious disease informatics is an emerging field that studies data collection, sharing, modeling, and management issues in the domain of This book on Infectious Disease Informatics (IDI) and biosurveillance is intended to provide an integrated view of the current state of the art, identify technical and Infectious Disease Informatics and Biosurveillance, Integrated Series in Information Systems 27, DOI 10.1007/978-1-4419-6892-0_1, 1. Centers for Disease In particular, we thank the members of the NSF-funded National Center of Excellence for Infectious Disease Informatics (BioPortal), Dr. Cecil Lynch from Infectious disease informatics is an emerging field that studies data collection, sharing, modeling, and management issues in the domain of infectious diseases. Infectious Disease Informatics pp 373-395 Cite as diseases and conclude with a description of the Infectious Disease Ontology (IDO) suite Lu, H. M., Zeng, D., & Chen, H. (2007). Medical ontology-enhanced text processing for infectious disease informatics (extended abstract). In ISI 2007: 2007 IEEE Book summary: This book on Infectious Disease Informatics (IDI) and biosurveillance is intended to provide an integrated view of the current The goal of infectious disease informatics is to optimize the clinical and public health management of infectious diseases through improvements in the