Record Nr. UNINA9910483899003321 Biosurveillance and Biosecurity: International Workshop, BioSecure **Titolo** 2008, Raleigh, NC, USA, December 2, 2008. Proceedings / / edited by Daniel Zeng, Hsinchun Chen, Henry Rolka, William B. Lober Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-89746-1 Edizione [1st ed. 2008.] 1 online resource (X, 183 p.) Descrizione fisica Lecture Notes in Bioinformatics, , 2366-6331;; 5354 Collana 362.1 Disciplina Soggetti **Bioinformatics** Computers and civilization Electronic data processing—Management User interfaces (Computer systems) Human-computer interaction Database management Computational and Systems Biology Computers and Society **IT Operations** User Interfaces and Human Computer Interaction **Database Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and author index. Nota di contenuto Informatics Infrastructure and Policy Considerations -- Public Health Information Fusion for Situation Awareness -- Biosurveillance, Case Reporting, and Decision Support: Public Health Interactions with a Health Information Exchange -- Bio-surveillance Event Models, Open Source Intelligence, and the Semantic Web -- Foresight China II: Identification and Detection of Infectious Diseases -- Public Health Preparedness Informatics Infrastructure. A Case Study in Integrated Surveillance and Response: 2004–2005 National Influenza Vaccine Shortage -- Network-Based Data Analytics -- Dynamic Network Model

for Predicting Occurrences of Salmonella at Food Facilities -- Network-

Based Analysis of Beijing SARS Data -- Tutte Polynomials and

Topological Quantum Algorithms in Social Network Analysis for Epidemiology, Bio-surveillance and Bio-security -- Biosurveillance Models and Outbreak Detection -- Integrating a Commuting Model with the Bayesian Aerosol Release Detector -- A Temporal Extension of the Bayesian Aerosol Release Detector -- A Z-Score Based Multi-level Spatial Clustering Algorithm for the Detection of Disease Outbreaks --Epidemic Thresholds in SIR and SIIR Models Applying an Algorithmic Method -- Test Power for Drug Abuse Surveillance -- Model Assessment and Case Studies -- Assessing the Accuracy of Spatiotemporal Epidemiological Models -- Simulation of Multivariate Spatial-Temporal Outbreak Data for Detection Algorithm Evaluation --Analysis and Prediction of Epidemiological Trend of Scarlet Fever from 1957 to 2004 in the Downtown Area of Beijing -- Environmental Biosurveillance and Case Studies -- Environmental Biosurveillance for Epidemic Prediction: Experience with Rift Valley Fever -- Spatial Regression-Based Environmental Analysis in Infectious Disease Informatics.

Sommario/riassunto

This book constitutes the refereed proceedings of the International Workshop on Biosurveillance and Biosecurity, BioSecure 2008, held in Raleigh, NC, USA, in December 2008. The 18 revised full papers presented together with one invited paper were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on informatics infrastructure and policy considerations; network-based data analytics; biosurveillance models and outbreak detection; model assessment and case studies; environmental biosurveillance and case studies.