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Biosurveillance and Biosecurity

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Preface

The 2008 Biosurveillance and Biosecurity Workshop (BioSecure 2008) was built on the success of the two U.S. National Science Foundation-sponsored Biosurveillance Workshops. The inaugural 2006 workshop was hosted by the University of Arizona's NSF BioPortal Center. It attracted more than 35 participants from academic institutions, industry, and public health agencies, and achieved its objective of bringing together infectious disease informatics (IDI) researchers and practitioners to discuss selected topics directly relevant to data sharing and analysis for real-time animal and public health surveillance. The 2007 meeting was held in New Brunswick, New Jersey, co-located with the 2007 IEEE International Conference on Intelligence and Security Informatics, and met with tremendous success. Researchers from a wide range of backgrounds, including biosecurity, epidemiology, statistics, applied mathematics, information systems, computer science and machine learning/data mining, contributed formal papers to the workshop and actively participated in the meeting along with practitioners from both government agencies and industry. More than 65 people attended the one-day workshop, representing major research labs across multiple disciplines, key industry players, and a range of government entities.

BioSecure 2008 continued this workshop series aiming to achieve the following objectives: (a) review and examine various informatics approaches for health surveillance and biosecurity from both technological and policy perspectives; and (b) discuss and compare various systems approaches and algorithms of relevance to biosurveillance and biosecurity. The specific emphasis of the 2008 meeting was to encourage information and computer science (including informatics, statistics, modeling and decision sciences, data management, and IT) researchers to join the public health surveillance and biosecurity community to conduct high-impact and innovative research.

We are pleased to have received many outstanding contributions from IDI research groups and practitioners from around the world. The one-day program included one invited presentation, 18 papers, and an all-inclusive poster session.

BioSecure 2008 was jointly hosted by the University of Arizona, the U.S. Centers for Disease Control and Prevention, and the University of Washington. We wish to express our gratitude to all workshop Program Committee members, who provided high-quality, timely, valuable and constructive review comments. In addition, we sincerely appreciate the efforts by our Government Liaisons, Sylvia Spengler from U.S. National Science Foundation, Donald Noah, U.S. Department of Homeland Security, and Daniel M. Sosin, U.S. Centers for Disease Control and Prevention, to broaden workshop participation from related academic and practitioner communities. We also would like to thank Catherine A. Larson, and several members of the Artificial Intelligence Laboratory and the Intelligent Systems and Decisions Laboratory at the University of Arizona for their excellent support.

BioSecure 2008 was held as part of the pre-conference workshop series at the International Society for Disease Surveillance (ISDS) Seventh Annual Conference. We wish to thank the ISDS society officers, meeting organizers, and support staff for their cooperation and assistance. We also wish to acknowledge the Springer LNCS editorial and production staff for their professionalism and continued support for intelligence and security informatics, IDI, and related events. Our sincere gratitude goes to the U.S. National Science Foundation as the main sponsor.

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