



2004 Syndromic Surveillance Conference
Boston, Mass.
November 3 — 4, 2004



Program Committee

Program Chair: Julie Pavlin, *Walter Reed Army Institute of Research*

Organizing Chair: Farzad Mostashari, *New York City DOHMH*

Claire Broome
*Centers for Disease
Control*

Julia Gunn
*Boston Public Health
Commission*

Kenneth Mandl
*Children's Hospital
Boston*

David Buckeridge
Stanford University

Richard Heffernan
New York City DOHMH

Bela Matyas
Massachusetts DOH

James Buehler
Emory University

Kelly Henning
New York City DOHMH

Elena Naumova
*Tufts University School of
Medicine*

Howard Burkom
*Hopkins Applied Physics
Lab.*

Patrick Kelley
Institute of Medicine

Marc Overhage
Riegenstrief Institute

Murray Campbell
IBM Watson Labs

Melvin Kohn
Oregon Health Services

Marcello Pagano
*Harvard School of Public
Health*

Dennis Cochrane
*Emergency Medicine
Association*

Martin Kulldorff
Harvard Medical School

Richard Platt
Harvard Medical School

Duncan Cooper
*Health Protection Agency,
UK*

William Lober
University of Washington

Henry Rolka
*Centers for Disease
Control*

Peter Estacio
*Department of Homeland
Security*

Joseph Lombardo
*Hopkins Applied Physics
Lab.*

Robert Rolfs
*Utah Department of
Health*

Louise Gresham
San Diego County HHS

John W. Loonsk
*Centers for Disease
Control*

Daniel M. Sosin
*Centers for Disease
Control*

David Madigan
Rutgers University

J.A. Magnuson
Oregon Health Services

Michael Stoto
RAND Corporation

Faculty Profiles

Jill A. Anthony, PhD

Dr. Jill Anthony is a post-doctoral fellow at Johns Hopkins Bloomberg School of Public Health. In April 2004, she joined the CDC-funded research on Developing a National Syndromic Surveillance System for the Veteran's Administration and civilian health care systems. She is a member of the spatial statistics component of the project and is working with Drs. Gregory Glass and Frank Curriero to develop the time series and spatial statistics for the project. Her background is pattern detection and quantification in space, time, and space-time on multiple levels of scale. This research specifically examines disease cluster detection and mapping for syndromic surveillance of influenza-like illnesses as a surrogate for bioterrorism.

Sharon Balter, MD

Dr. Sharon Balter is the Medical Director of the Waterborne and Enteric Disease Unit at the Bureau of Communicable Disease at the New York City Department of Health and Mental Hygiene. Prior to coming to the NYCDOHMH she served as an Epidemic Intelligence Service Officer at the Centers for Disease Control and Prevention in Atlanta and worked for the National Immunization Program. She is Board Certified in Internal Medicine and did her residency training at the University of Washington in Seattle.

Kate Bassil, MSc

Kate Bassil is a PhD candidate in the Epidemiology and Collaborative Program in Environment and Health at the University of Toronto. She is working with Toronto Public Health and her thesis will look the use of 911-Emergency Medical Services data for syndromic surveillance in Toronto. Prior to this Kate worked as an epidemiologist with York Region during the SARS outbreak in 2003. Kate's previous graduate work includes a MSc Epidemiology degree from the University of Toronto where she investigated patterns of *Pseudomonas aeruginosa* infection in children with cystic fibrosis. Kate obtained a BSc(Hons) Biological Sciences from Oxford University in 1998.

Elizabeth Begier, MD, MPH

Dr. Begier is an Epidemic Intelligence Service Officer with the Centers for Disease Control and Prevention. She assigned to Infectious Disease Division of the Connecticut Department of Public Health in Hartford, Connecticut. Her work primarily involves investigating infectious disease outbreaks and the evaluation and analysis of surveillance data. Prior to the Epidemic Intelligencer Service assignment, Dr. Begier was assigned to the Vaccine Safety Branch at the Food and Drug Administration. She analyzed post-marketing safety data for vaccines including a summary of adverse events reported after typhoid fever vaccination.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Dr. Begier is board certified in family medicine and preventive medicine. Her family medicine residency training was completed at Brown University, and her Master's in Public Health and preventive medicine residency was completed at Johns Hopkins School of Public Health. During her preventive medicine residency practicum year, she rotated at the Maryland Department of Health and Mental Hygiene where she completed a comparison of syndromic surveillance results using chief complaint versus discharge diagnosis.

Colleen Bradley, MPH

Ms. Bradley is currently working as a public health analyst for the BioSense project at the Centers for Disease Control. She earned her dual epidemiology and environmental/occupational health Masters of Science in Public Health from the Rollins School of Public Health at Emory University in 2004 and her undergraduate Bachelor of Science in biology from Wake Forest University in 2001. Ms. Bradley's current BioSense activities include user enrollment and training, maintaining communications with state and local users, assistance with system monitoring, the development of a BioSense monitor working group, and various other tasks. She has also conducted statistical analyses for several epidemiologic studies for the National Center for Environmental Health, including the Fallon leukemia cluster study and the first US study to evaluate the relationship between serum levels of PCBs and dioxins and endometriosis. In her spare time, Colleen enjoys playing soccer and is training for her first marathon.

Agneta Breitenstein, JD, MPH — Chief Privacy Officer, Institute for Health Metrics

Judith C. Brillman, MD

Dr. Brillman is a Professor of Emergency Medicine at the University Of New Mexico School Of Medicine. Prior to her 16 years in New Mexico, she was on the faculty of Stanford University School of Medicine.

Dr. Brillman's interest in syndromes reaches back to the late 1980's when she edited the text "Infectious Disease in Emergency Medicine" which considers infections in terms of the syndrome by which they present rather than by the causative organism. Dr. Brillman was then one of the founders of the Raid Syndrome Validation Project. This was followed by a position as the medical director for a syndromic surveillance program coordinated by Los Alamos national labs under the Bio-defense initiative (B-SAFER). She was also a consultant to DARPA's bio-Alert Surveillance Program.

Dr. Brillman has been active in graduate medical education (GME), including being an Emergency Medicine residency director for seven years. She now plays a major role in the GME Associate Dean's office. Her other research areas are in health services and infectious disease.

David L. Buckeridge, MD, MSc

David is a Post-Doctoral Fellow in Medical Informatics at the Palo Alto VA Health Care System and a Doctoral Candidate in Medical Informatics at Stanford University. His research area is public health informatics with a focus on methods for disease surveillance. Current research projects include developing simulation-based methods for evaluating syndromic surveillance systems and developing methods to account for spatial mobility in surveillance analysis. In addition to his research activities, Dr Buckeridge sits on a number of committees, including the Technical Advisory Committee for the California Environmental Health Tracking Program.

Before arriving at Stanford and the Palo Alto VA, David undertook five years of postgraduate medical training in Community Medicine through the Department of Public Health Sciences at the University of Toronto, Canada. During this period, his research focused on the use of geographical information systems and spatial statistics in public health. In 1998 he was awarded an MSc in epidemiology for a study of the relationship between exposure to motor vehicle emissions and respiratory illness. In 2000, Dr Buckeridge was named a fellow of the Royal College of Physicians and Surgeons of Canada.

James W. Buehler, MD

Dr. James Buehler is a Research Professor of Epidemiology and a member of the Center for Public Health Preparedness and Research at the Rollins School of Public Health at Emory University. He also serves as a Consultant Epidemiologist at the Georgia Division of Public Health. During a 21-year career at the Centers for Disease Control and Prevention, he worked in a range of public health areas, including general field epidemiology, maternal and child health, and HIV/AIDS. His work in public health surveillance has spanned analysis, methods development, systems management, and application of surveillance data to program and policy improvement. Dr. Buehler's current focus is on strengthening existing systems as well as developing new surveillance methods to detect and respond to epidemics as quickly as possible and on strengthening the role of epidemiology in public health practice.

Howard S. Burkom, PhD

Dr. Burkom received a BS degree in mathematics from Lehigh University in 1970 and an MS degree in mathematics from the University of Illinois/Champaign in 1971. He received a Ph.D. in the field of geometric topology from the University of Illinois in 1978. He has worked since 1979 as a mathematician at The Johns Hopkins University Applied Physics Laboratory. His projects have included operations research in the area of tactical oceanography, design of acoustic arrays and active sources, target strength analysis, modeling of electromagnetic propagation in the atmosphere, statistical analysis of platform vulnerability to lidar detection, and adaptive signal processing.

In early 2000 he began to apply acoustic detection methodology to the surveillance of clinical and nontraditional data sources for outbreaks of disease. This effort led from signal processing to

epidemiological approaches in biostatistics, data mining, and statistical process control. He now serves as manager of the Anomaly Discovery effort in the Biosurveillance program in the National Security Technology Department at APL. He has participated in external military and civilian studies aimed at evaluating temporal and spatiotemporal detection algorithms.

Wendy W. Chapman, PhD

Dr. Chapman is an assistant professor of Medicine at the Center for Biomedical Informatics at the University of Pittsburgh. She received her PhD in Medical Informatics from the University of Utah in 2000 and completed an NLM postdoctoral fellowship in 2003.

Dr. Chapman's main interest is applying natural language processing (NLP) techniques to the medical domain. The majority of her research has focused on information extraction from dictated clinical records, including chest radiograph reports, Emergency Department reports, and chief complaints. As part of the RODS Laboratory, she helped create a biosurveillance collaboration with the State of Utah. She is currently evaluating the performance of free-text clinical data, such as triage chief complaints, chest radiograph reports, and emergency department reports, at detecting disease outbreaks.

Joon Pil Cho PhD — Professor, Department of Emergency Medicine, Ajpu University Medical Center

Michael Coletta, MPH

Michael Coletta is an Epidemiologist with the State of Georgia's Division of Public Health. During G8, he was heavily involved in the development and implementation of the response. Mr. Coletta is currently working on STD surveillance issues with the state of Georgia as well as improving, evaluating, and automating the syndromic surveillance system.

Prior to G8, Michael was working to evaluate surveillance systems in Georgia, including the feasibility of syndromic surveillance. Michael has been with the State of Georgia for 6 years, where he has also worked in the Office of Health Information and Policy, and as a district Epidemiologist. Mr. Coletta received his Masters Degree in Public Health from the University of Texas – Houston School of Public Health. Prior to that time he worked as a Public Health Advisor for CDC.

Duncan Cooper

After graduating from Nottingham University in 1990 with a degree in Geography, Mr. Cooper worked and traveled around the world before completing a Masters of Research in the Built Environment at Leeds University in 1996. He then worked as a research assistant for the Nuffield Institute for Health in Leeds before joining the West Midlands Cancer Intelligence Unit as a Geographical Information Systems (GIS) Officer in 1997. Since 2000, he has worked as a Scientist for Health Protection Agency and NHS Direct, developing and maintaining a new



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

national symptom surveillance system based on NHS Direct call data. His particular focus is in the surveillance of influenza and gastrointestinal disease. Since 9/11, the system surveillance system and Mr. Cooper's work have expanded to cover a range of bio-terrorist agents.

Urania Dafni, ScD

Dr. Dafni is Associate Professor and Director of the Laboratory of Biostatistics at the Department of Public Health, School of Nursing, University of Athens, Greece. Since 2002, she is the Scientific Director of the Syndromic Surveillance System established in Greece by the Hellenic Center for Infectious Diseases Control (HCIDC) at the Ministry of Health. After her doctoral studies at the department of Biostatistics, Harvard School of Public Health (HSPH), she remained at HSPH for two years, serving as Neurology Section Head at the Statistical and Data Analysis Center of the AIDS Clinical Trials Group. She returned to Greece in 1995, where she held academic appointments at the Department of Statistics, Athens University of Economics and Business and at the University of Athens where she is currently. She has also served as Vice-Chairman on the Bioequivalence Committee at the Food and Drug Administration of Greece. She is one of the founding members of the Eastern Mediterranean Region of the International Biometric Society (EMR-IBS) and she is currently serving a second term as the Publicity Officer for the Region. She is starting her 3-year term as Biometrics Bulletin Editor in January 2005. Her research interests include clinical trials methodology as well as methodology for aberration detection in syndromic data series.

James Daniel, MPH

Jim Daniel obtained his Masters Degree in Public Health from Boston University School of Public Health. He is currently the Director of Informatics for the Office of Integrated Surveillance and Informatics Services within the Bureau of Communicable Disease Control at the Massachusetts Department of Public Health. Jim has been with the program for 4 years. Jim has developed statewide communications infrastructure for various state and federal agencies. He currently oversees the Massachusetts Registry Project and manages bureau-wide informatics projects including the Homeland (formerly Health) Alert Network (HAN) and the Public Health Information Network (PHIN) disease reporting systems.

Debjani Das, MPH — Research Scientist, New York City Dept. of Health and Mental Hygiene

Mary P. Derby, RN, MS, MPH

Mary Derby received her Master of Science degree in Community Health Nursing and Master of Public Health degree from Boston University. Ms. Derby has over 20 years of nursing experience in pediatric acute and ambulatory care, managed care, public health nursing and community collaboration. As Director of Nursing Services in southern New Mexico she was responsible for the direct supervision of the public health nursing program spanning 15 local health offices in seven counties bordering Mexico, Texas and Arizona. She worked extensively with local health offices, medical providers and their community groups on community needs



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

assessments for assurance of optimal health services including disease surveillance and emergency preparedness.

Ms. Derby, presently a Research Specialist, is a PhD epidemiology student and a National Institute of Health, National Institute of Nursing Research predoctoral training fellow in the Graduate Program, Mel and Enid Zuckerman Arizona College of Public Health, University of Arizona. Her present research involves evaluating the usefulness of poison center call data as a means of complementing public health surveillance systems for foodborne disease outbreaks. She has published in the areas of hospice care and teen pregnancy decision making.

Alexander Doroshenko, MD, MPH, MRCPCH, DFPH — HPA West Midlands

Luiz Duczmal, PhD

Dr. Duczmal is Associate Professor of Universidade Federal de Minas Gerais, Brazil, in the Statistics Department, working with research, graduate and undergraduate teaching. His research activities include spatial statistics and its applications to public health and crime analysis, and computational statistics. Dr. Duczmal obtained a PhD. in Applied Mathematics. He has realized a post-doctoral program as Visiting Professor at Harvard Medical School in 2004, working with Dr. Martin Kulldorff.

Peter Estacio, PhD MD MPH — Senior Medical Advisor, BioSecurity Program Executive Officer, Department of Homeland Security

Arnold Fang, MPH

Arnold Fang is currently a Research Officer with the Surveillance and Epidemiology Branch of the Centre for Health Protection (CHP), a new agency in charge of disease control in the Hong Kong SAR Government. He is the convener of a team of staff that develops a multi-sectoral sentinel surveillance system for infectious diseases in Hong Kong. He also manages the production of Communicable Diseases Watch, the centre's biweekly bulletin which is a channel for disseminating surveillance data and outbreak news to professionals and the general public.

Prior to joining CHP in Hong Kong, Arnold was a Programme Officer specializing in Disaster Management at Oxfam Hong Kong, an international relief and development organization. Through the position he gained experience in planning community-based disaster monitoring, early warning and mitigation projects. Arnold obtained his master's degree at the Harvard School of Public Health, and had also had a year of community health promotion experience among the Asian immigrant community in Boston before he returned to Hong Kong in 2002.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Manfred Green, MD, MPH, PhD

Manfred Green is the director of the Israel Center for Disease Control and has held that position since 1994. He was born in Johannesburg and emigrated to Israel in 1976. He holds a BSc (Hons) degree in mathematical statistics from the University of Witwatersrand (1968), an MSc in operations research (1970) and MBChB (1976) from the University of Cape Town and a PhD in epidemiology (1982) at the University of North Carolina at Chapel Hill. He is board specialized in public health, occupational medicine and medical administration and is currently chairman of the examinations committee for specialization in public health in Israel. His academic affiliation is with Tel Aviv University where he is a professor and past chairman of the Department of Epidemiology and Preventive Medicine in the Faculty of Medicine. He is the current incumbent of the Stanley and Diana Steyer Chair in Cancer Prevention and Control and is director of the Center for Bioterrorism Research at Tel Aviv University. His research interests include new methodology in epidemiology, cancer epidemiology, the epidemiology of infectious diseases and syndromic surveillance.

Colin R. Goodall, PhD

Dr. Goodall is lead technical developer and statistician for AT&T Labs - Research in syndromic surveillance. This work includes a team of developers and researchers from AT&T Labs and AT&T Government Solutions. Additionally, Dr. Goodall's work at AT&T Labs is in databases and statistical fraud detection and usage management for AT&T's telecommunications products, and includes development around AT&T's "Scamp" call detail platform, one of the world's largest databases.

Prior to joining AT&T in 1999, Dr. Goodall was senior vice president in research and statistics at Quadramed Corporation and at Health Process Management. Over a period of 12 years in academia and at these companies, he developed systems for statistical analysis and graphical display of health care outcomes, related to hospital care, home health care, and pharmaco-economics. Professor Goodall's academic career includes faculty appointments at Princeton University and Penn State University, and visiting positions at Stanford, Australian National University, Columbia, Leeds, and Bristol Universities. His most recent appointment is adjunct professor at Tulane University. He has around 50 published papers in areas of statistics and healthcare. Dr. Goodall has a Ph.D. in statistics from Harvard, and a B.A./M.A./Dip.Math.Stat. from Cambridge University.

Shaun Grannis, MD, MS

Dr. Shaun Grannis is a Medical Informatics Researcher at the Regenstrief Institute, Inc. and Indiana University School of Medicine, where his research interests include developing methods to improve patient matching and record linkage across separate health care institutions, both in automated and human guided fashion. Additionally, Dr. Grannis is actively involved in bio-terrorism detection and syndromic surveillance research. He is currently involved in a 2-year study exploring multiple facets of disease detection and syndromic surveillance challenges,

including geographical deidentification, understanding temporal-spatial disease trends, and establishing syndromic surveillance data standards. He is also involved in a 4-year project to integrate data flows from all hospitals in the state of Indiana for use in disease surveillance and clinical research. Dr. Grannis maintains an active clinical practice and is an Assistant Professor in the department of Family Medicine at Indiana University.

Julia E. Gunn, RN, MPH

Ms. Gunn has worked for the Boston Public Health Commission in the Communicable Disease Control Division for over 10 years, assuming the position of Associate Director in 2003. During this time Julia has contributed to dozens of publications and presentations enhancing our understanding of tuberculosis, HIV infection, food-borne illness, and other communicable illnesses, particularly among disadvantaged populations. She has played a key role in the development and integration of enhanced surveillance systems in Boston.

James Hadler, MD

Dr. Hadler is the State Epidemiologist and Director of the Infectious Diseases Division at the Connecticut Department of Public Health. He has worked in this capacity, directing the CT infectious disease surveillance and control programs, since 1984. During his tenure, he has been involved in development of the CT response to a number of emerging infectious disease issues, including the response to one of the mail-related anthrax cases. Recently, he has overseen the development of enhanced surveillance for possible bioterrorism incidents including development of novel hospital admissions, gram positive rod and rash illness surveillance systems. He is also an active member of the Council of State and Territorial Epidemiologists and the author of a recent CSTE position statement on collaborative planning for development and implementation of bioterrorism-related systems for public health. Dr. Hadler is trained in Internal Medicine, Infectious Diseases and Preventive Medicine.

Shilpa Hakre, DrPH

Shilpa Hakre joined the Field Studies Department at Walter Reed Army Institute of Research in September 2003 as an epidemiologist. She earned her DrPH (2003) and MPH (1997) degrees from the Uniformed Services University of the Health Sciences at Bethesda, Maryland. Prior to graduate studies, she worked at the Belize U. S. Epidemiological Research Center and the Belize Ministry of Health for five years as a medical technologist and research assistant.

Richard Heffernan, MPH

Rick Heffernan became interested in public health while working in West Africa for the Peace Corps. After earning his MPH at Columbia University in 1992 he joined a study at the New York City Department of Health and Mental Hygiene to examine HIV transmission among STD clinic patients in the South Bronx. In 1994 he moved to the Bureau of Communicable Disease where he worked on routine notifiable disease surveillance, outbreak investigations, and the

development of a system to track drug-resistant pneumococcal disease. After conducting doctoral studies at Yale University and in Central Africa he returned to the Bureau in October 2001 to oversee its syndromic surveillance unit and a new communicable disease surveillance system. His interests include pneumococcal disease, information systems design and analytic methods for infectious disease surveillance.

William Hogan, MD

Dr. Hogan is an Assistant Professor of Medicine at the University of Pittsburgh. He is a member of the RODS Laboratory, which is a collaboration between the University of Pittsburgh and Carnegie Mellon University. The RODS Laboratory was founded in 1999 to investigate methods for real-time detection and assessment of disease outbreaks. Dr. Hogan's research interests include detection of outbreaks caused by aerosol dispersion of bioagents, development of other detection algorithms, determining the best categories of over-the-counter healthcare products for the detection of various disease outbreaks, analysis of the performance of syndromic surveillance systems, and analyses of outbreak detectability.

Prior to joining the RODS Laboratory at the University of Pittsburgh, Dr. Hogan was Medical Director of Knowledge Modeling at Health Language, Inc. Prior to that role, he was Associate Medical Director of the Electronic Health Record project at UPMC Health System. Dr. Hogan is board-certified in Internal Medicine and completed residency training at the University Health Center of Pittsburgh. He graduated from Jefferson Medical College in Philadelphia, PA.

Kathy Hurt-Mullen, MPH

Kathy Hurt-Mullen has served as County Epidemiologist in Montgomery County, Maryland since early 2002. Her principal responsibilities are the establishment of epidemiologic and surveillance capacity to support the County's Public Health Emergency Preparedness and Response program but extend also to the broad epidemiologic support of all communicable disease program activities and consultation on all community health data concerns. Ms. Hurt-Mullen received her MPH in Epidemiology and Biostatistics from the University of South Florida in 1991.

Prior to joining the Montgomery County Department of Health and Human Services, she worked in the state departments of health in Florida and Maryland. In those positions she developed expertise in the design of public health data collection systems to monitor community health, evaluate programs and guide health policy decision-making. Among these systems were surveillance for antibiotic resistance in clinical isolates, post-hurricane/tropical storm surveillance for changes in community health status as well as enhancements of conventional notifiable disease surveillance. Ms. Hurt-Mullen has additionally worked as contractual liaison to the CDC and FDA regarding epidemiologic data concerns in the Vaccine Adverse Events Reporting System (VAERS).

Vijay Iyengar — IBM Research

Jeffrey Johnson, MPH

Mr. Johnson is a Senior Epidemiologist with the County of San Diego, Department of Health & Human Services Agency. He is the Director of the Data Analysis and Bioterrorism Surveillance Section and is also the Deputy Bioterrorism Coordinator for San Diego County. Jeff is the administrative lead for several bioterrorism grants related to surveillance and is a member of the California State Syndromic Surveillance Workgroup. He was responsible for directing syndromic surveillance activities for the 2003 Super Bowl and currently helps coordinate and integrate surveillance activities between state and federal agencies.

James Kaferly III, BS

Mr. Kaferly is the project manager for the National Bioterrorism Syndromic Surveillance Demonstration Project at the Clinical Research Unit of Kaiser Permanente of Colorado. His other current research areas of interest include childhood immunization safety, pre-diabetes prevention and smoking reduction. He was a volunteer at Club Jerry, I.A.P., a youth center in Guaymas, Sonora, Mexico prior to joining Kaiser Permanente. Mr. Kaferly is President of Friends of Club Jerry, the Club's supporting organization.

Bryant T. Karras, MD

Dr. Karras is Assistant Professor in the Department of Health Services at University of Washington, School of Public Health and Community Medicine with an adjunct appointment in the Department of Medical Education, Division of Biomedical & Health Informatics in the School of Medicine. Dr. Karras has specialized in utilizing informatics to improve patient care and public health. He has been teaching and mentoring Masters and PhD students in Health Services and Informatics programs.

Previous research includes bioterrorism detection using syndromic surveillance of clinical information systems and the use of portable computers for survey data collection and guideline implementation. He has authored articles on techniques in heterogeneous data collection from hospitals (syndromic surveillance) for bioterrorism (BT). He developed SuML (Survey Markup Language) an XML survey encoding and data interchange system. He has implemented survey systems in asthma guidelines and cancer care quality of life assessment. In 2000, Drs. Karras, Lober and Duchin began developing the Syndromic Surveillance Information Collection (SSIC) system that is being used in Seattle and neighboring counties to monitor for possible bioterrorism events.

In addition to Public Health Informatics and BT detection, his research interests also include the practical implementation of public health records systems, wireless handheld systems and methodology for web-based survey data collection and health interventions.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Prior to joining the UW, Dr. Karras earned a degree in bio-medical Engineering from University of California, San Diego (UCSD), and a medical degree from the University of Wisconsin, Madison. He completed his residency and was chief resident in Internal Medicine at Sinai-Samaritan Hospital, the Milwaukee Clinical Campus of the University of Wisconsin, and completed a post doc fellowship in Medical Informatics at Yale University, New Haven, CT.

Mat Kendall — New York City Department of Health and Mental Hygiene

Ken Kleinman, ScD

Ken Kleinman is a biostatistician and Assistant Professor in the Department of Ambulatory Care and Prevention at the Harvard Medical School and Harvard Pilgrim Health Care. He has been involved with methods development for longitudinal and clustered data, as well as innovative applications of such methods, for 10 years. Multi-level models, also called hierarchical or mixed effects models, are a particular focus for him. He also has related interests in missing data methods and Bayesian techniques. His portfolio also includes bioterrorism surveillance, where he has proposed novel application of methods to identify possible attacks on a neighborhood scale.

Charles Konigsberg, MD, MPH

Dr. Charles Konigsberg is currently Health Director for the Alexandria (Virginia) Health Department. In addition to his duties as the local health director for Alexandria, Virginia, Dr. Konigsberg has been active in various activities in the National Capital Region including serving two terms as Chair of the Metropolitan Washington Council of Government (MWCOC) Health Officials Committee. Dr. Konigsberg currently is serving as chair of the National Capital Region (NCR) Enhanced Surveillance Operating Group (NCR ESOG) overseeing the collaboration with the Johns Hopkins University/Advanced Physics Laboratory to develop a regional approach to syndromic surveillance using ESSENCE.

Dr. Konigsberg has served as the State Health Official for Kansas and Delaware as well director for several local health departments. He was appointed to the National Commission on AIDS by Senator Bob Dole and served as the only public health official on the Commission from 1988-1993. He is a graduate of the Public Health Leadership Institute. Dr. Konigsberg was a member of the House of Delegates for the Delaware Medical Society 1994-1996. He also served two terms on the Board of Regents for the American College of Preventive Medicine. He received his MD from the University of Tennessee Center for the Health Sciences and his MPH from the University of North Carolina School of Public Health. He is certified in Public Health by the American Board of Preventive Medicine. Dr. Konigsberg is the recipient of the Guy M. Tate Award from the Alabama Public Health Association.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Rita Kukafka, DrPH, MA — Assistant Professor, Department of Biomedical Informatics, Columbia University

Martin Kulldorff, PhD

Dr. Kulldorff is Associate Professor, Department of Ambulatory Care and Prevention, Harvard Medical School and Harvard Pilgrim Health Care, Boston. Dr. Kulldorff is a biostatistician with experience in both statistical methods development and in the design and analysis of epidemiological and clinical research studies. The focus of his methodological research is on the development of new statistical methods for disease surveillance, including methods for the early detection of disease outbreaks. He has, among other things, developed the spatial and space-time scan statistics for disease cluster detection and inference, as well as SaTScan (www.satscan.org), a free software product for its implementation. He has served a scientific advisor and/or consultant on disease mapping and the early detection of disease outbreaks to among others: the World Health Organization, the Centers for Disease Control and Prevention, the National Cancer Institute, New York City Department of Health and New York State Department of Health.

Bill Lober, MD, MS

Bill Lober, MD, MS is a Research Assistant Professor at the University of Washington School of Medicine, in the Department of Medical Education and Biomedical Informatics. He graduated from the UCSF/UC Berkeley Joint Medical Program, completed a residency at the University of Arizona, and is board certified in Emergency Medicine. Prior to developing interests in clinical medicine, he was in the computer industry for 10 years. He has a BSEE in Electrical Engineering from Tufts University, graduate training in Computer Engineering from UC Davis, and worked in both hardware and software engineering positions. His academic interests include heterogeneous database integration, information system-based surveillance, computer supported collaborative work, security, web infrastructures, and image annotation. Dr. Lober is co-director of UW Clinical Informatics Research Group. Funded research includes work on the Seattle & King County Syndromic Surveillance system, patient self-reported data and patient decision support, Clinical Case Conference Information System, PDA-based data collection for public health, and SML-based development and integration of small clinical systems.

John W. Loonsk, MD

John W. Loonsk, M.D. is Associate Director for Informatics and Acting Director, National Center for Public Health Informatics Centers for Disease Control and Prevention. He received his medical training at the State University of New York at Buffalo after graduating from the Johns Hopkins University. In August of 1999, he joined the National Center for Infectious Diseases at the Centers for Disease Control and Prevention as Associate Director for Informatics and Chief Information Officer. Since joining the CDC he has become instrumental in the planning and development of the National Electronic Disease Surveillance System (NEDSS) and other activities to support the advancement of public health informatics. In February of 2000, he was named CDC Associate Director for Informatics and has led critical efforts in developing and



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

implementing approaches to public health information technology that have been instrumental in improving public health informatics at CDC and nationally. These efforts include leading the Public Health Information Network, being CDC's IT lead for preparedness and response, leading the development of the BioSense initiative, and leading the user-focused redesign of the CDC's Internet presence. In 2004, Dr. Loonsk was named acting director of CDC's newly created National Center for Public Health Informatics.

Throughout his time in academic medical centers and public health, Dr. Loonsk has published and been involved with just-in-time information delivery, electronic disease surveillance, knowledge management, digital libraries, decision support, and inter-networked healthcare.

Haobo Ma, MD, MS

Dr. Haobo Ma is a CDC Public Health Informatics fellow. He graduated from Peking Union Medical College in 2000 and received his Master of Science Degree in Medical Informatics from the University of Pittsburgh in 2003. Prior to his CDC fellowship, Dr. Haobo worked in the Real-time Outbreak and Disease Surveillance Laboratory at the University of Pittsburgh. He is currently working at the CDC's Bio-Intelligence Center on the integration of lab order data into the BioSense system. His past projects in CDC included developing of Public Health Surveillance Knowledgebase™ and participating in DARPA BioAlert Project

Jennifer K. MacFarquhar, RN, BSN, CIC

Ms. MacFarquhar is the Hospital-based Public Health Epidemiologist Program Coordinator for the North Carolina Division of Public Health and the Statewide Program for Infection Control and Epidemiology at the University of North Carolina at Chapel Hill. The North Carolina Hospital-based Public Health Epidemiologist Program supports epidemiologist positions within hospitals to assist hospitals with preparedness efforts and to serve as liaisons between hospitals and the public health sector. Jennifer holds a B.S. degree in Nursing, Certifications in Infection Control and Community Preparedness and Disaster Management, and is pursuing her Master's in Public Health Leadership at UNC-CH. Jennifer has practiced in the field of Epidemiology since 1997 within the Duke University Health System and as an independent consultant.

Steven F. Magruder, PhD

Dr. Magruder is a member of the Principal Professional Staff at the Johns Hopkins University Applied Physics Laboratory. He is a member of the ESSENCE team, which was created to evaluate and develop syndromic surveillance technology. Some foci of his work have been comparing and evaluating syndromic surveillance data sources, developing techniques to help define syndrome groups in over-the-counter pharmaceutical data and in nurse advice call data, developing techniques and models to reduce confounding effects in various data sources, and contributing to alertment algorithm design.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Dr. Magruder received his Ph.D. in physics in 1978 from the University of Illinois at Urbana. He joined JHU/APL that same year, and has spent most of the times since then doing testing, modeling and detection/signal processing algorithm development related to a variety of submarine sensing technologies. He joined the ESSENCE team at JHU/APL in 2001.

Farzad Mostashari, MD, MSPH

Dr. Mostashari is a leader and innovator in non-traditional disease surveillance and outbreak detection. He did his graduate training at the Harvard School of Public Health and Yale Medical School, internal medicine residency at Mass General Hospital, and completed the CDC's Epidemic Intelligence Service. He was one of the lead investigators in the outbreaks of West Nile Virus and anthrax in NYC. He is Adjunct Assistant Clinical Professor at Tufts University School of Medicine, Clinical Assistant Professor at Weil Cornell Medical College, and an Assistant Commissioner at the NYC Department of Health. He has served as Chair and co-Chair for the 2002, 2003, and 2004 Syndromic Surveillance Conferences.

David Muscatello, BSc, MPH

David is a Senior Epidemiologist with the Centre for Epidemiology and Research of the New South Wales (NSW) Department of Health in Sydney, Australia. David is currently Manager, NSW Emergency Department Surveillance Program, which aims to provide early warning of potential public health emergencies and epidemics. David is a graduate of the NSW Public Health Training Program and has a Masters in Population Health from the National Centre for Epidemiology and Population Health at the Australian National University. David and colleagues have an interest in population health informatics, and are involved in a wide range of activities aimed at better measuring and reporting the health of the population.

Elena Naumova, PhD — Tufts University

Daniel B. Neill, MPhil

Daniel Neill is a PhD candidate in the Department of Computer Science at Carnegie Mellon University. A member of the RODS Lab and Auton Lab, his research includes statistical methods and efficient algorithms for detection of spatial and spatio-temporal clusters. He received his B.S.E. from Duke University in 2001, M.Phil. from Cambridge University in 2002, and M.S. from Carnegie Mellon University in 2004.

Mei-Lien Pan

Marc Paladini, MPH

is a research scientist with the New York City Department of Health and Mental Hygiene. He works in the Syndromic Surveillance and Data Analysis Program of the Bureau of Communicable Disease. In addition to assisting with the daily syndromic surveillance efforts in NYC, he is responsible for coordinating regional syndromic surveillance for bioterrorism

detection. Marc attempts to combine his “shoe leather” epidemiological experience with his love of data analysis and SAS programming and is very excited about working for the NYCDOHMH.

Prior to coming to NYC in May 2004, Marc worked for several years as an epidemiologist in New Jersey with the Bergen County Department of Health. He has an MPH from Yale University in Infectious Disease Epidemiology and Biostatistics and did his fieldwork studying Arboviruses, including Eastern Equine Encephalitis in Connecticut and West Nile Virus in NYC.

Mei-Lien Pan, MS

Ms. Pan obtained her M.S. degree at Institute of Public Health of National Yang Ming University (NYMU), Taiwan in 2000. She worked in the Cardinal Tien College of Nursing, Taiwan as a lecturer from February 2001 and taught Basic Computer Concept and Computer Application. Currently, she is a Ph.D. candidate at the Institute of Public Health of NYMU majoring in medical informatics. Her interests include medical information systems, evaluation in medical information systems, clinical data research, and applications of natural language processing to medical text reports.

Julie Pavlin, MD, MPH

Dr. Pavlin is currently assigned to the Walter Reed Army Institute of Research as the Chief of the Field Studies Department. She received her MD from Loyola University and her MPH from Harvard University and is board certified in general preventive medicine and public health. She was the executive producer of two satellite broadcasts on the response to and medical management of biological casualties while stationed at the US Army Medical Research Institute of Infectious Diseases. She currently devotes most of her time designing innovative real-time health indicator surveillance systems for the early recognition of disease outbreaks and bioterrorism.

Darcy Phelan

Ms. Phelan is a graduate student in the Epidemiology of Infectious Diseases at the Johns Hopkins Bloomberg School of Public Health. She holds a BS in Microbiology from the University of Michigan. Prior to graduate school, Ms Phelan worked in a TB research laboratory at the Rockefeller University and then as a field research assistant for several community-based HIV and HCV studies with the New York Academy of Medicine. Her presentation stems from work over the past summer at the Bureau of Epidemiology Services at the NYC Department of Health and Mental Hygiene. Upon finishing her Masters degree, Ms Phelan plans to pursue a doctoral degree with an emphasis on epidemiology and public health practice.

Janet Pichette, MS

Janet Pichette is a Staff Epidemiologist/Toxicologist with the Austin/Travis County Health and Human Services Department. Janet serves as the Manager for the Epidemiology Program and is part of the Public Health Preparedness Team for the City of Austin. She received her B.S. degree in Health Education from the University of Tennessee at Chattanooga and a M.S. in Health Research from Texas State University in 1990. Prior to joining the City of Austin, Janet worked as an epidemiologist for the State of Texas for 18 years. She most recently worked at the Texas Commission on Environmental Quality where her work focused on policy development, strategic planning, epidemiology, and toxicology. Prior to that, she worked for the Texas Department of Health (TDH) as an epidemiologist in the Environmental Epidemiology Program. Her work at TDH work focused on health studies and disease surveillance activities defining the epidemiology of occupational diseases, cancer, respiratory diseases and other environmental health problems.

Sivakumaran Raman, MBBS, MS

Sivakumaran (“Siv”) Raman works as a Clinical Informatics Analyst at the Children’s Hospitals and Clinics of Minneapolis and St. Paul. He earned his degree in Medicine from Delhi University (Maulana Azad Medical College) in 1998 and practiced Medicine for some time in India. He received his Master of Science degree from the Health Informatics program at the University of Minnesota in 2003 and joined Children’s the same year. He now devotes all his time to Clinical Informatics seeking to use knowledge extracted from the Clinical Information System at Children’s in the most effective ways. His interests include clinical decision support and clinical data standards. He uses Perl as his programming language of choice. Siv is a member of the American Medical Informatics Association, the Healthcare Information and Management Systems Society, and the Free Software Foundation.

Arthur Reingold, MD

Dr. Reingold is Professor and Head of the Division of Epidemiology in the School of Public Health (SPH) at the University of California, Berkeley (UCB). He holds concurrent appointments in Medicine and in Epidemiology and Biostatistics at the University of California, San Francisco (UCSF). Dr. Reingold completed his BA and MD degrees at the University of Chicago and then completed a residency in internal medicine at Mt. Auburn Hospital in Cambridge, Massachusetts. He is board certified in internal medicine and holds a current medical license in California, but has devoted the last 25 years to the study and prevention of infectious diseases in the U.S and in developing countries throughout the world.

Dr. Reingold began his career as an infectious disease epidemiologist at the U.S. Centers for Disease Control and Prevention (CDC), working there for eight years. While at CDC, Dr. Reingold worked domestically on Toxic Shock Syndrome, Legionnaires’ disease, bacterial meningitis, fungal infections, and non-tuberculous mycobacterial infections and internationally on epidemic meningitis in West Africa and Nepal. Since joining the faculty at UCB in 1987, Dr.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Reingold has worked on a variety of emerging and re-emerging infections in the U.S.; on acute rheumatic fever in New Zealand; and on AIDS, tuberculosis, malaria, and acute respiratory infections in Brazil, Uganda, Ivory Coast, Zimbabwe, India and Indonesia. Dr. Reingold has directed the National Institutes of Health (NIH) Fogarty AIDS International Training and Research Program at UCB/UCSF since its inception in 1988; co-directed (with Dr. Duc Vugia of the California Department of Health Services), the CDC-funded California Emerging Infections Program since its inception in 1994; and served as the Principal Investigator of the UCB Center for Infectious Disease Preparedness (CIDP) since its inception in 2002.

Dr. Reingold regularly teaches courses on epidemiologic methods, outbreak investigation, and the application of epidemiologic methods in developing countries, among others. He also regularly teaches short courses on similar topics in Brazil, Switzerland, and other countries. Dr. Reingold has been elected to membership in the American Epidemiological Society; fellowship in the American Association for the Advancement of Science and the Infectious Diseases Society of America; and membership in the Institute of Medicine of the National Academy of Sciences.

Ben Y. Reis, PhD

Dr. Ben Reis is an Instructor at Harvard Medical School and a faculty member of the Children's Hospital Informatics Program. His research in biosurveillance focuses on novel methods for signal integration, dealing with real-world noise, and event-driven surveillance. Dr. Reis received his doctorate from the University of Cambridge, where he attended as a Marshall Scholar. He completed his postgraduate training at Harvard Medical School, where he held an NIH Fellowship in Health Informatics, focusing on functional genomics, clinical informatics and public health surveillance. Dr. Reis has lectured at MIT, Harvard, and Cambridge Universities, and has extensive research background in the computational health and biomedical technologies fields.

Dr. Reis has worked as a management consultant for McKinsey and Company and recently served as Manager of the Markle Foundation's Information Technologies for Better Health program, working to help consumers, patients, and health care providers use information technology to improve health and health care.

Sara L. Rizzo

Ms. Rizzo received her B.S. in industrial engineering in 2003 from the University of Pittsburgh where she is currently pursuing her M.S. in biostatistics. She is currently a graduate student researcher at the RODS Lab where she conducts case study evaluation on the NRDM and RODS systems.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Carla Rodriguez, MPH

Carla Rodriguez is a Research Scientist with the Syndromic Surveillance/Data Unit of the New York City Department of Health and Mental Hygiene (NYCDOHMH), Bureau of Communicable Disease (BCD). Her work focuses on evaluating and improving data quality of the Syndromic Surveillance System, as well as developing new uses for Syndromic Surveillance, including the early detection of carbon monoxide poisoning and waterborne disease.

Prior to joining the BCD, Ms. Rodriguez worked for 7 years as an environmental epidemiologist, first with the Columbia Center for Children's Environmental Health and later with the NYCDOHMH Lead Poisoning Prevention Program. Ms. Rodriguez received her Master of Public Health from the Columbia University School of Public Health.

Henry Rolka, MS

Henry Rolka is currently on detail from the National Immunization Program (NIP) to the Epidemiology Program Office (EPO) to coordinate cross cutting and emerging analytic requirements for CDC decision support. He completed his Master's degree in Statistics and Kansas State University after which he came to the CDC and worked as a statistical consultant to the Epidemic Intelligence Service Program for five years prior to serving as Chief of the Statistical Analysis Branch in the NIP. Mr. Rolka is a co-organizer with the Center for Discrete Mathematics and Theoretical Computer Science's (DIMACS) five-year special focus on Computational Epidemiology; specifically for a working group on Disease and Adverse Event Reporting, Surveillance and Analytics. In the last few years he has provided invited presentations on the topic of challenges to analytics in public health surveillance to the Washington Statistical Society, the National Science Foundation, the National Center on Birth Defects and Developmental Disabilities, the Food and Drug Administration, and the American Statistical Association.

Emily E. Sickbert-Bennett, MS

Ms. Sickbert-Bennett has served as the Public Health Epidemiologist for the University of North Carolina Health Care System since November 2003. In this role, she acts as an in-hospital liaison to local health departments, performs surveillance for community-acquired infections of public health significance (including outbreaks), performs surveillance for defined syndromes which may be indicative of a terrorist attack, assists with epidemiological investigations, and provides education to clinicians within the healthcare system.

Previously, Ms. Sickbert-Bennett has also served as a Disease Investigation Specialist on a regional public health surveillance team. She received her Master of Science Degree in Environmental Microbiology from the University of North Carolina at Chapel Hill School of Public Health in 2002 and her Bachelor of Science degree in Biology from the University of North Carolina at Chapel Hill in 2000. Her current research interests include the evaluation of



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

communicable disease reporting and surveillance, evaluation of and uses for syndromic surveillance, and outbreak investigations.

Alan J. Siniscalchi, MPH, MS

Alan Siniscalchi, an epidemiologist with the State of Connecticut Department of Public Health, serves as the operational coordinator of the Hospital Admission Surveillance System (HASS). In this capacity, he reviews reports of daily admissions from all 32 Connecticut acute care hospitals and coordinates follow-up investigations of signals indicative of potential bioterrorist events. He also utilizes the HASS to help track the incidence of influenza and identify emerging infections.

Alan first joined the Department of Public Health following completion of his Master of Public Health degree from Yale University School of Medicine. He has coordinated a number of programs for the agency including efforts in environmental toxicology and risk assessment, occupational health, indoor air quality, radon and radiological health and risk communication. While working on radiological health issues, Alan was appointed on a special committee of the U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB). In 2002, he was inducted into the Yale University Public Health Alumni Public Service Honor Roll. When not working on public health issues, Alan is active on statewide environmental conservation efforts including serving as Vice President of the Connecticut Association of Conservation and Inland Wetlands Commissions.

Leslie Z. Sokolow, MSc, CGIS

Ms. Sokolow is a BioSense Surveillance Monitor with CDC's BioIntelligence Center. She is a member of a team responsible for daily monitoring and analysis of national syndromic data covering 90 states, territories, and metropolitan regions. In addition, she conducts investigations of BioSense data aberrations to determine causes and response.

Prior to joining the BioSense project, Ms. Sokolow was a researcher for the National Institute for Occupational Safety and Health, working on a geographic analysis of coal miners' pneumoconiosis. Other recent work has included a study on the effects of weather and day of week on toxic exposure (National Center for Environmental Health) and a geographic analysis of teen risk behavior in Georgia, Montana, and Maine (Georgia State University).

Ms. Sokolow earned her MSc in zoology at the University of Oklahoma and conducted ecological field research in Panamá and Brazil. She completed her professional certification in geographic information science at Georgia State University.

Deborah Stacey, PhD

Deborah Stacey is an associate professor in the department of Computing and Information Science at the University of Guelph. She is also a founding member of the Guelph Natural Computation Research Group. Her research focuses on the development and application of

artificial neural network and evolutionary computation techniques to the analysis of bio-medical data. Current research projects include: a high performance animal disease spread simulator (funded by the Canadian Food Inspection Agency and based on the Schoenbaum disease spread model from the USDA); aberration detection for syndromic surveillance (funded by Health Canada); development of a grid computing software suite called CheapGrid to utilize spare cycles in collections of workstations; and the application of clustering and neural networks models to infectious disease survey data (joint work with Health Canada and the Ontario Veterinary College).

Dr. Stacey is also one of the founding directors of SHARCNET, a high performance computing consortium in south-western Ontario. Established in 2001, SHARCNET currently has 11 university and college member institutions and serves hundreds of researchers in areas from astrophysics to biocomputing to financial mathematics. Deborah serves as the University of Guelph site leader for this project and is actively involved with the high performance computing community across Canada.

Michael A. Stoto, PhD

Dr. Stoto, an epidemiologist and statistician, is Associate Director for Public Health in the RAND Center for Domestic and International Health Security. He is also an Adjunct Professor of Biostatistics at the Harvard School of Public Health. Before coming to RAND in September 2001, Dr. Stoto was a professional staff member at the Institute of Medicine (IOM), where he led numerous projects in public health practice. He has an undergraduate degree in statistics from Princeton and a PhD in statistics from Harvard. Dr. Stoto's research experience includes methodological topics in epidemiology, statistics, and demography, research synthesis/meta-analysis, community health assessment, disease surveillance, performance measurement and the evaluation of public health interventions. His substantive areas of expertise include HIV/AIDS, infectious disease and immunization policy, maternal and child health, tobacco, and environmental health.

Dr. Stoto is currently investigating the statistical and practical issues associated with early detection of bioterrorism events, and has led a study for the Metropolitan Washington Council of Governments regarding the feasibility of regional surveillance in the Washington metropolitan area. He has also worked on HIV surveillance nationally and in the District of Columbia, and on coordinated regional surveillance for West Nile Virus in the Washington area. He is currently participating in an evaluation of the Department of Health and Human Services bioterrorism preparedness activities, and a review of the adequacy of California's public health system to protect and improve the health of local communities. He is also a member of the RAND team analyzing national smallpox vaccine policy.

Fu-Chiang (Rich) Tsui, PhD

Dr. Tsui is Research Assistant Professor of Medicine and Intelligent Systems and has a faculty appointment at the Center for Biomedical Informatics and is Associate Director of the Real-time



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Outbreak and Disease Surveillance (RODS) Laboratory. His research interests include time series analysis, artificial neural networks, digital signal processing, wavelet transforms, and database design and management. Dr. Tsui's work in the RODS Laboratory is directed toward the use of information technology for the real-time detection of disease outbreaks and for the improvement of clinical preparedness to deal with outbreaks that occur naturally or as a result of bioterrorism. Dr. Tsui is the principal developer of the health system resident component (HSRC), a computerized system that utilizes health care systems data that are routinely collected in the course of patient care and then transmits reportable results to hospital users. The HSRC is in compliance with standards used in the National Electronic Disease Surveillance System (NEDSS). Dr. Tsui is also currently working with the RODS Laboratory team to develop the National Retail Data Monitor (NRDM) system as part of BioSense, one of the three new bioterrorism initiatives established by President George W. Bush in January 2003.

Kees (C.C.) van den Wijngaard

After graduating from Wageningen University in 2001 in Animal Science, Dr. van den Wijngaard worked at the Veterinary Epidemiology department of Wageningen University, and joined the Dutch Animal Health Service in 2002.

Since 2003, Dr. van den Wijngaard has been employed at the Centre for Infectious Diseases Epidemiology, National Institute for Public Health and the Environment in Bilthoven (The Netherlands), working on a research project on syndromic surveillance combined with WNV surveillance.

David Walker, MPH

David is a Public Health Analyst with the National Center for Public Health Informatics at the Centers for Disease Control and Prevention (CDC). He currently serves as one of the project coordinators for BioSense. In this role, he oversees the continuing enhancement and maintenance of BioSense, as well as coordinates the day-to-day operations of the BioIntelligence Center, the group that utilizes BioSense to perform outbreak detection and signal investigation, and provides public health user support.

Previously, David served as the Deputy Branch Chief of the Statistical Analysis Branch of the National Immunization Program at CDC, coordinating the data management activities of large-scale vaccine safety projects. In this role, he served a year-long temporary duty assignment on the National Smallpox Vaccination Program, coordinating the data management and reporting needs for the Program. Prior to working at CDC, David had 10 years of public health experience working as a Statistical Analyst with the Oklahoma Department of Mental Health and Substance Abuse Services.

David has a Master of Public Health degree in BioStatistics from the University of Oklahoma, College of Public Health, and a Bachelors Degree in Psychology. Professional interests include



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

the application of data warehousing and data mining techniques in the utilization of large-scale, novel data sources for time-sensitive analysis and reporting.

Garrick L. Wallstrom, PhD

Dr. Garrick L. Wallstrom is Sr. Statistician and Instructor of Medicine in the RODS Laboratory at the University of Pittsburgh. He received his PhD from the School of Statistics at the University of Minnesota. He was a Visiting Assistant Professor in Statistics at Carnegie Mellon, where he conducted research on Bayesian adaptive smoothing methods and automatic correction of ocular artifacts in the EEG. His current research interests include the evaluation of syndromic surveillance systems and the development of outbreak detection algorithms.

Shannon Wieland

Ms. Wieland is an M.D.– Ph.D. student at Harvard Medical School and the Massachusetts Institute of Technology in the Health Sciences and Technology Program. She is currently working toward a doctorate in applied mathematics. Ms. Wieland graduated from Ohio State University in 1999 with degrees in mathematics and chemistry. She is investigating mathematical models of disease transmission, advised by Kenneth Mandl, M.D., M.P.H., and Bonnie Berger, Ph.D. She is also engaged in research at Harvard Medical International on the quality of care in short-term medical missions abroad. Upon completion of her M.D.-Ph.D. studies, she plans to train in emergency medicine.

Weng-Keen Wong, PhD

Dr. Wong is a Postdoctoral Associate with the RODS Laboratory at the University of Pittsburgh. He is currently working on the Bayesian Biosurveillance project, which has as its primary goal the development of new Bayesian algorithms that monitor electronically available healthcare data for the early detection of outbreaks. Prior to joining the RODS lab, Dr. Wong was a member of the AUTON lab at Carnegie Mellon University. In January 2004, he completed his PhD on data mining for early disease outbreak detection. Dr. Wong is from Vancouver, British Columbia where he received his B. Sc. from the University of British Columbia.

W. Katherine Yih, PhD, MPH

W. Katherine Yih is a biologist and an epidemiologist. She worked for four years as epidemiology coordinator for the Immunization Program of the Massachusetts Department of Public Health, then served for a year and a half as the Pan American Health Organization's representative in Brazil in the area of vaccines and immunization. Now at the Department of Ambulatory Care and Prevention of Harvard Medical School and Harvard Pilgrim Health Care, she is lead epidemiologist on the National Bioterrorism Syndromic Surveillance Demonstration Program and conducts studies on vaccine safety and effectiveness for the Vaccine Safety Datalink. Dr. Yih's research interests include infectious disease epidemiology and the adaptation of pathogens to mass immunization and other disease-control measures.



2004 Syndromic Surveillance Conference



Wednesday, November 3 — Thursday, November 4, 2004

Yiliang Zhu, PhD

Dr. Yiliang Zhu is associate professor of Epidemiology and Biostatistics at the University of South Florida. He directs the Biostatistics PhD program as well as the Biostatistics and Epidemiology Center for Collaborative Research. He served as a principal investigator or co-investigator on a number of federally funded research grants, including those from the NSF, NIH, EPA, and CDC. He also served on special committees and panels to review research grant proposals and health and regulatory policies. His recent research has focused on environmental health risk assessment and related methodology, risk assessment of medical adverse events, and health outcome evaluation.