International Society for Disease Surveillance

2014 ISDS Conference

PROGRAM

Challenges and Solutions for the Road Ahead

December 9-11, 2014 Philadelphia, Pennsylvania
## MY CONFERENCE PLANNER

### Day 1: December 10th

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>Welcome &amp; Keynote</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td>9:50 AM</td>
<td>Concurrent Session 1</td>
<td></td>
</tr>
<tr>
<td>11:20 AM</td>
<td>Poster Session A</td>
<td>Columbus Ballroom Foyer</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>Concurrent Session 2</td>
<td></td>
</tr>
<tr>
<td>2:10 PM</td>
<td>Plenary and Awards</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td>3:50 PM</td>
<td>Concurrent Session 3</td>
<td></td>
</tr>
<tr>
<td>5:30 PM</td>
<td>Poster Session B</td>
<td>Columbus Ballroom Foyer</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>ISDS Reception</td>
<td>Columbus Ballroom Foyer</td>
</tr>
</tbody>
</table>

### Day 2: December 11th

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>Annual Meeting of Members</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Highlight on Ebola Response</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td>9:40 AM</td>
<td>Concurrent Session 4</td>
<td></td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Roundtable Session</td>
<td></td>
</tr>
<tr>
<td>12:10 PM</td>
<td>Committee Meetings</td>
<td></td>
</tr>
<tr>
<td>1:10 PM</td>
<td>Concurrent Session 5</td>
<td></td>
</tr>
<tr>
<td>1:50 PM</td>
<td>Closing Keynote</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Awards and Closing</td>
<td>Grand Ballroom ABC</td>
</tr>
</tbody>
</table>

---

### 3rd Floor Hyatt Regency at Penn’s Landing Floor Plan

*Washington Room Located on 4th Floor*
A Note from Richard Hopkins MD, MSPH, ISDS President and Board Chair

I would like to welcome all of you to this conference devoted to the ongoing improvement of public health surveillance. ISDS brings together people from many disciplines and settings: epidemiologists, statisticians, informaticians and others; public health practitioners and academic partners; workers with human, animal and environmental surveillance; workers focused on infectious, toxic, and chronic diseases; and workers from many countries. All in support of disease prevention and control, of course. Whatever your discipline or your affiliation, you are welcome here, and I hope and expect you will learn information and skills that you can apply in your home setting to improve and protect health. Thanks for attending.

What does ISDS offer to the biosurveillance community?

1. A growing global network that joins surveillance practitioners and researchers from 280+ organizations in 40+ countries worldwide.

2. Unparalleled experience building and supporting Communities of Practice (CoPs) among surveillance professionals to keep project momentum going and provide an outlet for community input.

3. A trusted communication portal for knowledge exchange to keep abreast of the latest findings best practices, policy changes, and events related to disease surveillance.

4. Extensive subject matter expertise in innovative approaches to disease surveillance, surveillance systems and processes, statistical analyses and tools, syndromic surveillance, One Health approaches, and public health informatics.

5. Strong competencies in project management, consultations, consensus building, priority setting, standards development, and other technical services to move ideas to action.

6. Capabilities in rigorous evaluation and assessment through electronic surveys and other qualitative and quantitative methods to collect, analyze, and report data and information.

7. 13 years of experience coordinating the ISDS Conference, the premier event for surveillance professionals to exchange their ideas and results, build knowledge and skills, and network to initiate new partnerships.

8. Expertise in developing and delivering targeted public health workforce training activities from workshops and webinars to distance learning.

9. The neutrality of a third party agency that is well positioned as a non-governmental, non-partisan entity to provide evidence-based and unbiased products and services.

10. A friendly professional staff renowned for reliability and productivity and the organizational agility to quickly adapt to change and take advantage of new opportunities.
ABOUT ISDS

ISDS represents professionals from all aspects of the biosurveillance community, including epidemiologists, informaticians, health care providers, statisticians, and other stakeholders in the public health surveillance enterprise.

Our Approach
ISDS builds capacity, strengthens infrastructure, and support the needs of the global biosurveillance community by cultivating action-oriented collaborations, creating networks, and fostering innovations in surveillance through research, education, and advocacy.

Keep it Social!
Twitter: @ISDS
Share comments and feedback on sessions using #2014ISDSc

Facebook:
Like us on Facebook! Facebook.com/syndromic

LinkedIn:
Connect with us on LinkedIn by searching: “International Society for Disease Surveillance”

ISDS has members in 40+ countries!

Our Mission
The International Society for Disease Surveillance works to improve population health by advancing the science and practice of surveillance to support timely and effective prevention and response.

Community Forum:
The ISDS Community Forum is a community-built and directed space for connecting and collaborating with other ISDS Members, answering questions, and sharing important news and events: Communityforum.syndromic.org/

Earn CPH Credits!
ISDS is an approved provider of Certified in Public Health (CPH) Recertification credits. The National Board of Public Health Examiners (NBPHE) created the CPH credential to recognize public health practitioners who have mastered core competencies of public health and continue their education to remain at the forefront of public health practice. Conference participants can earn up to 9 CPH credits toward recertification.
Scientific Planning Committee Co-Chair
Ian Painter, MSc, PhD, University of Washington

Ian Painter is Co-Investigator for the Northwest Preparedness and Emergency Response Research Center’s (PERRC) Bystander CPR Project. He also works as biostatistician on other Northwest PERRC projects and as faculty for the Public Health Management Certificate and Northwest Public Health Leadership Institute.

Ian is also Clinical Assistant Professor at the University of Washington School of Public Health in the Department of Health Services. He received his Masters of Science in Mathematics form the University of Auckland, New Zealand, and his PhD in Statistics from the University of Washington.

Scientific Planning Committee Co-Chair
José Lojo, MPH, Philadelphia Department of Public Health

José Lojo is an epidemiologist at the Philadelphia Department of Public Health (PDPH), Division of Disease Control’s Epidemiology Unit. He currently manages PDPH’s syndromic surveillance system, ILINet, and laboratory-based surveillance of respiratory viruses and also provides support to the acute communicable disease and public health preparedness programs. Prior to this, he completed a fellowship with the Florida Epidemic Intelligence Service, where he assisted the Polk County Department of Health with hurricane disaster response. Previous work with CDC included research into childhood lead poisoning and diabetes surveillance. José has been an ISDS member since 2006 and served as a scientific program committee track chair in 2010. He holds an MPH from Emory University.

Board Liaisons:
Atar Baer, Epidemiologist, Public Health – Seattle & King County

Joseph Lombardo, Program Manager, Johns Hopkins University Applied Physics Laboratory

Track Chairs:
Analytics/Methods:
David Atrubin, Environmental Epidemiologist, Florida Department of Health

Informatics:
Brian Dixon, Assistant Professor, School of Informatics and Computing, Indiana University-Purdue University

Peter Hicks, Health Scientist, U.S. Centers for Disease Control and Prevention

Policy:
Don Olson, Research Scientist, New York City Department of Health and Mental Hygiene
Julie Pavlin, Deputy Director, Department of Defense, Armed Forces Health Surveillance Center

Public/Population Health Surveillance Practice:
Stacey Hoferka, Surveillance and Informatics Epidemiologist, Illinois Department of Public Health
Vivek Singh, Assistant Professor, Public Health Foundation of India, Indian Institute of Public Health - Hyderabad

Committee:
Céline Dupuy, Epidemiologist, French Agency for Food Environmental and Occupational Health and Safety

Teresa Hamby, Data Analyst, New Jersey Department of Health and Senior Services

Amy Ising, NC DETECT Program Director, UNC at Chapel Hill

Bryant Thomas Karras, Public Health Informatics Officer, Washington State Department of Health

Wayne Loschen, Section Supervisor, Johns Hopkins University Applied Physics Laboratory

Beatty-Viv Maikai, Researcher/Lecturer, Ahmadu Bello University Zaria, Kaduna State Nigeria

Tonya McKenney, Epidemiologist, Tennessee Department of Health

Lauren Snyder, Applied Public Health Informatics Fellow, Denver Public Health

Todd Stout, President, FirstWatch Solutions, Inc.
Pre-Conference Planning Committee Members

Erin Austin, Enhanced Surveillance Epidemiologist, Virginia Department of Health

Fernanda Dórea, Epidemiologist, Swedish National Veterinary Institute

Julie Pavlin, Deputy Director, Department of Defense, Armed Forces Health Surveillance Center

Kyle Ryff, Surveillance Coordinator, Puerto Rico Department of Health

Anikah Salim, Epidemiologist, Maryland Dept. of Health and Mental Hygiene

Bill Storm, Syndromic Surveillance Epidemiologist, Ohio Department of Health

Pre-Conference Planning Committee Chair
Zachary Faigen, Epidemiologist, Maryland Department of Health and Mental Hygiene

Zachary Faigen earned his B.S. degree in biology from the University of South Carolina in 2006 and his M.S.P.H. degree in epidemiology from Emory University in 2008. He has worked as a registered environmental health specialist and an epidemiologist in both the private and public sectors. He has conducted syndromic surveillance with a focus in emergency preparedness, in Maryland and the National Capital Region for the last four years, as the lead for the ESSENCE program at the Maryland Department of Health and Mental Hygiene. During his tenure at the health department, he has overseen the expansion of the ESSENCE program to include reportable disease data and school absenteeism data from all public schools in the state of Maryland.

Building the Evidence Base – and your Resume!
The ISDS 2014 Conference abstracts are the best compilation of the latest thinking in disease surveillance. The reviewed and accepted ISDS 2014 Conference abstracts will be published in a special supplement of the Online Journal of Public Health Informatics (OJPHI), a quarterly, open-access, peer-reviewed journal that is PubMed referenced (www.firstmonday.dk/ojs/index.php/ojphi). Is your abstract on your CV?

What’s on your mind?
ISDS wants to make it easy for you to connect at the conference. Look for those around you with name tag ribbons. These are the invited speakers, ISDS Board Members and Staff, BioSense Governance Group members, Students, and Conference Planning Committee people that want to hear from you.

Talk it up!
ISDS BOARD OF DIRECTORS AND STAFF

2014 Board of Directors

Board President
Richard Hopkins, MD, MSPH, Professor,
University of Florida

Co-Vice-President
Amy Ising, MS, Program Director, NC DETECT,
University of North Carolina, Chapel Hill; Board
Liaison to the Research Committee and Technical
Conventions Committee

Co-Vice-President
Aaron Kite-Powell, MS, Epidemiologist,
Massachusetts Institute for Technology (MIT)
Lincoln Laboratories; Board Liaison to the
Education and Training Committee

Treasurer
Joseph S. Lombardo, MS, Principal Investigator,
Centers for Disease Control and Prevention
Academic Centers of Excellence in Public Health
Informatics, Johns Hopkins University Applied
Physics Laboratory; Board Liaison to the
Conference Committee

Board Members
Atar Baer, PhD, MPH, Epidemiologist and
Syndromic Surveillance Coordinator, Public
Health-Seattle & King County; Board Liaison to the
Conference

James Buehler, MD, Health Commissioner,
Philadelphia Department of Public Health;
Professor, Drexel University

Bryant Thomas Karras, MD, Chief Public Health
Informatics Officer/meaningful Use Coordinator
and Senior Epidemiologist, State of Washington
Department of Health

Wayne Loschen, MS, Technical Lead for ESSENCE
System, John Hopkins University Applied Physics
Laboratory

Larissa May, MD, MSPH, Assistant Professor of
Emergency Medicine and Epidemiology and
Biostatistics, George Washington University;
Board Liaison to the Public Health Practice
Committee

Scott McNabb, PhD, MS, Professor, Emory
University, Rollins School of Public Health;
Adjunct Professor, King Saud Bin Abdulaziz
University for Health Sciences; Senior Consultant
and Managing Partner, Public Health Practice,
LLC; Senior Consultant, Global Strategies, LLC.;
Board Liaison to the Global Outreach Committee

Vivek Singh, MPH, MBBS, Assistant Professor,
Indian Institute of Public Health – Hyderabad,
Public Health Foundation of India

Victor J. Del Rio Vilas, PhD, MSc, MBA, DVM,
Veterinary Public Health Advisor, Rabies Focal
Point, and Zoonosis Coordinator, Pan American
Health Organization

Board Secretary – Non Voting Member
Rosalie Phillips, MPH, Executive Director,
Tufts Health Care Institute

ISDS Staff

Laura Streichert, PhD, MPH, ISDS Executive Director

Katrina DeVore, MPH ISDS Program Coordinator

Lauren Johnson, ISDS Program Coordinator

Brooke Evans, ISDS Program Assistant

ISDS thanks the Skoll Global Threats Fund
for sponsoring the International Travel
Award Recipients!

http://www.skollglobalthreats.org/
Sponsors
ISDS thanks the sponsors of the 2014 ISDS Conference for their generous support!

Exhibitors
Exhibit Location: Grand Ballroom Foyer
Exhibit Hours: Wednesday, December 10th 7:00am – 5:00pm; Thursday, December 11th 7:00am – 2:00 pm

Media Partners
<table>
<thead>
<tr>
<th>Time</th>
<th>Function</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00AM–6:30PM</td>
<td>Registration Open</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>7:00 AM</td>
<td>Continental Breakfast</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Welcome and Introduction</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td>8:20 AM</td>
<td>Concurrent Track Sessions</td>
<td></td>
</tr>
<tr>
<td>8:20 AM</td>
<td>Track 1: Biosurveillance for Beginners</td>
<td>Columbus Ballroom A</td>
</tr>
<tr>
<td>8:20 AM</td>
<td>Track 2: Biosurveillance and Policy Issues for Experts</td>
<td>Grand Ballroom D</td>
</tr>
<tr>
<td>8:20 AM</td>
<td>Track 3: Introduction to R for Biosurveillance</td>
<td>Columbus Ballroom B</td>
</tr>
<tr>
<td>8:20 AM</td>
<td>Track 4: Mapping and Biosurveillance: Using ArcGIS</td>
<td>Columbus Ballroom C</td>
</tr>
<tr>
<td>9:50 AM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>10:15 AM</td>
<td>Concurrent Track Sessions</td>
<td></td>
</tr>
<tr>
<td>12:00 PM</td>
<td>LUNCH</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>12:45 PM</td>
<td>Concurrent Track Sessions</td>
<td></td>
</tr>
<tr>
<td>2:15 PM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>2:45 PM</td>
<td>Concurrent Track Sessions</td>
<td></td>
</tr>
<tr>
<td>4:15 PM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>4:30 – 6:30 PM</td>
<td>Swap Meet</td>
<td>Grand Ballroom Foyer</td>
</tr>
</tbody>
</table>

Please Complete Your Evaluation for your Pre-Conference Training! We Listen!

This year’s Trainings were developed based on the feedback we received after the 2013 ISDS Pre-Conference Trainings. Please take a moment and help us to continue to these educational trainings!

Biosurveillance for Beginners

Location
Columbus Ballroom A

Description
This training will provide exposure to key topics central to biosurveillance and serve to orient those who are new to the field. The objective of Track 1 is to “bridge the knowledge gap” to enable participants to better understand and apply public health data for informed and meaningful decision-making and to communicate outcomes or results. It includes an overview of biosurveillance, as well as demonstrations of the integration of novel data sources (emergency department chief complaints, emergency medical services, school absenteeism, and poison control center calls) with syndromic surveillance systems and their application in daily biosurveillance practice.

7:00 AM | Continental Breakfast
8:00 AM | Welcome and Introduction
Zachary Faigen, MSPH, Chair of ISDS Pre-Conference Planning Committee
8:20 AM | Overview of Biosurveillance
Julie Pavlin, MD, MPH  Armed Forces Surveillance Center
9:20 AM | Data Source: Emergency Dept.
David Atrubin, MPH, Florida Department of Health
9:50 AM | Break
10:15 AM | Data Source: Poison Control
Lana Deynakea, MD, NC Department of Health and Human Services
11:00 AM | Data Source: EMS
Nicole Schlaefli, MPH, Tulsa City County Health Department
10:15 AM | Data Source: Absenteeism
Anikah Salim, MPH, CPH, Baltimore Department of Health

Morning Learning Objectives:
• Learn the history and background of biosurveillance
• Become familiar with various data sources that are currently used to conduct biosurveillance
• Develop an understanding of how each data source is used on a daily basis by surveillance practitioners

12:00 PM | Lunch
1:00 PM | Data System Breakout Session
NC DETECT: Amy Ising, MS, University of North Carolina at Chapel Hill
ESSENCE: Erin Austin, MPH, Virginia Department of Public Health
EpiCenter: Teresa Hamby, MSPH, New Jersey Department of Health and Senior Services
2:15 PM | Break
2:45 PM | Data System Breakout Session
NC DETECT: Amy Ising, MS, University of North Carolina at Chapel Hill
ESSENCE: Erin Austin, MPH, Virginia Department of Public Health
EpiCenter: Teresa Hamby, MSPH, New Jersey Department of Health and Senior Services
4:15 PM | Break
4:30 PM | Swap Meet
Location: Columbus Ballroom Foyer

Afternoon Learning Objectives:
• Become familiar with various syndromic surveillance systems that are used to conduct disease surveillance
• Understand the fundamentals of each surveillance system and how the systems are used to conduct surveillance during a real-life situation
Biosurveillance and Policy Issues for Experts

Description
This training will provide experienced biosurveillance professionals with a forum for learning about and discussing current topics and policies essential to biosurveillance, as well as an opportunity to collaborate with other experts in the field to develop practical products and tools. It will include panel discussions on natural disaster surveillance and One Health Surveillance (OHS), as well as a plenary roundtable session on the "Meaningful Use" of electronic health data. In addition, the track will feature roundtable discussions that will focus on identifying key capacity-building activities for supporting and advancing OHS approaches.

Ultimately, this training is intended to leverage the collective expertise of the group to advance participants' understanding and practice and to allow for a high-quality and seamless translation of the knowledge gained in the workshop within the participants' organizations.

7:00 AM | Continental Breakfast

8:00 AM | Welcome and Introduction
Zachary Faigen, MSPH, Chair of ISDS Pre-Conference Planning Committee

8:00 AM | Plenary Panel:
Natural Disaster Surveillance

Panelists:
Laurel Boyd, MPH, State of Oregon
Teresa Hamby, MSPH, New Jersey Department of Health
Julia Gunn, RN, PMH, Boston Public Health Commission

Objectives:
- Develop an understanding of how disease surveillance is conducted before, during, and after a natural or man-made disaster

9:50 AM | Break

10:15 AM | Plenary Roundtable:
Meaningful Use of Electronic Data

Moderators:
Daniel Chaput, Office of the National Coordinator for Health Information Technology

Objectives:
- Gain an understanding of where the Meaningful Use process currently stands in the United States
- Explore the "Meaningful use" of electronic data by public health practitioners from around the globe
- Discuss how electronic data is collected, onboarded, analyzed, and used on a global scale

12:00 PM | Lunch

12:45 PM | Welcome and Intro
John Berezowski, DVM, PhD Monitoring and Surveillance Systems, Switzerland

1:05 PM | Survey Results
Katrina DeVore, MPH, ISDS

2:45 PM | OHS Panel
Moderator:
Judy Akkina, PhD, MPH, USDA,APHIS, VS

Panelists:
Mario Libel, MD, MPH, Skoll Global Health Fund
Leslie Bulaga, MPH, USDA, APHIS Veterinary Services
Julia Gunn, RN, MPH, Boston Public Health Commission

Objectives:
- Engage OHS experts from the US and abroad in a discussion of examples and strategies for advancing OHS.
- Identify key areas for improving OHS approaches based on responses from an OHS survey administered by ISDS

2:15 PM | Break

2:45 PM | OHS Breakout Discussions
Fernanda Dörea, DVM, PhD
National Veterinary Institute, Sweden
Vivek Singh, MPH, MBBS,
Public Health Foundation of India
Flavie Vial, PhD,
Veterinary Public Health Institute, University of Bern
John Berezowski, DVM, PhD Monitoring and Surveillance Systems, Switzerland
Adam Crawley, MPH, Skoll Global Threats Fund
Victor Del Rio Vilas, PhD MSc, MBA, DVM, PAHO

Learning Objectives
- Identify and prioritize action items and capacity-building activities for advancing and improving OHS approaches through small group discussions among workshop participants from human health, animal health, and environmental health perspectives.
Introduction to R for Biosurveillance

Location
Columbus Ballroom B

Description
The public health workforce (public health practitioners, healthcare providers, and academicians in research settings) require data, as well as analysis and visualization of that data, to enable and provide informed decision-making, whether clinically-based or policy-based. Continued budgetary restrictions and funding cuts have somewhat hindered the ability to purchase commercial products and applications; therefore, public health has a strong need for exposure to and training with open-source products and tools for data collection, analysis, and visualization. R is a language and environment for statistical computing and graphics (http://www.r-project.org/). It provides a variety of statistical and graphical techniques and is extensible. As an open-source product, R is freely available, making it optimal for use in a variety of settings. This training is a hands-on introduction to R for epidemiology, biosurveillance, and high-quality data visualizations.

Presenters
Jarad Niemi, PhD, Assistant Professor, Iowa State University
Dr. Jarad Niemi develops statistical methodology for applications to next generation sequencing, ecology, and disease surveillance. His research focuses on computational aspects of Bayesian inference including Markov chain Monte Carlo and sequential Monte Carlo techniques. Dr. Niemi has used R for 10 years and regularly teaches new users.

Yevgeniy Elbert, MS, Biostatistician, Johns Hopkins University Applied Physics Laboratory
Yevgeniy Elbert has extensive experience in developing and reporting on systems for disease surveillance. Since 2001, he has been working on the development of Electronic Surveillance System for the Early Notification of Community Based Epidemics (ESSENCE) at Walter Reed Army Institute of Research and later JHUAPL. He has been an active member of ISDS since its inception in 2003.

Eric Lau, Assistant Professor, School of Public Health, University of Hong Kong
Dr. Eric Lau is interested in the methodology and application of statistical and mathematical modeling of infectious diseases. He is currently working on infectious disease surveillance, statistical and mathematical modeling of tuberculosis, scarlet fever and and influenza in human and poultry.

Objectives
- Be familiar with the open-source R software and explain how to perform the common data analysis procedures using hypothetical data.
- Understand how to obtain common statistical summary measures using hypothetical surveillance data in R
- Know useful visualization tools in R

7:00 AM | Continental Breakfast
8:00 AM | Welcome and Introduction
Zachary Faigen, MSPH, Chair of ISDS Pre-Conference Planning Committee
8:20 AM | Overview of R
9:50 AM | Break
10:15 AM | Data Visualization I
12:00 PM | Lunch
1:00 PM | Data Visualization II
2:15 PM | Break
2:45 PM | Advanced Biosurveillance
Mapping and Biosurveillance: Using ArcGIS

Location
Columbus Ballroom C

Description
Advances in geographical information systems (GIS) and mapping technologies have created exciting new opportunities for public health professionals to collect, analyze, display, and share multiple types of data and information. Biosurveillance has benefited greatly from these tools and continues to be enhanced as more individuals learn the nuances of GIS. ArcGIS, the mapping software developed by ESRI, has become the industry standard and is used in most public health departments in the U.S. This session will provide an introduction and focused examples of how the ArcGIS platform can be used for biosurveillance. Topics covered include: introduction to ArcGIS Online; introduction to Esri Maps for Office and integration of Esri Maps for Office and ArcGIS Online; and introduction to Community Analyst/Business Analyst. There will be a didactic session for each topic, followed by a hands-on session to apply the skills learned. Typical geocoded tabular health data will be provided for the hands-on sessions.

Presenters
Natalie Jung, Esri, Inc.

Ms. Jung joined Esri as the Health and Human Services Marketing Coordinator in 2012. She is the hub of all efforts, responsible for coordinating projects and initiatives the global newsletter, conferences, marketing materials, and case studies. Her background includes hospital inpatient administration where and information technology, the volunteer program, and implemented new systems such as bed management, patient satisfaction, and inpatient flow. She has a Bachelor’s degree in Psychology from La Sierra University and a Master of Business Administration with Health GIS emphasis.

Objectives
- Install ArcGIS
- Locate, load and visualize data to produce useful maps
- Complete basic spatial analysis of health data
- Add supporting data to put health data in to context
- Be able to manage, share, and distribute data through mapping online
- Learn how to integrate GIS into day to day workflow

7:00 AM | Continental Breakfast
8:00 AM | Welcome and Introduction
Zachary Faigen, MSPH, Maryland Department of Health and Mental Hygiene
8:20 AM | Introduction to ArcGIS
9:50 AM | Break
10:15 AM | Applying Skills Learned to Build a Project 1
11:15 AM | Introduction to Esri Maps for Office
12:00 PM | Lunch
12:45 PM | Integration of Esri Maps for Office and AGOL
1:45 PM | Applying Skills Learned to Build a Project 2
2:15 PM | Break
2:45 PM | Applying Skills Learned to Build a Project
3:15 PM | Introduction to Community Analyst/Business Analyst
2:15 PM | Break
4:15 PM | Applying Skills Learned to Build a Project 3
Swap Meet

Location
Grand Ballroom Foyer

Description
The Swap Meet Provides the opportunity for pre-conference training and conference participants to interact informally with presenters on a broad variety of relevant topics, including syndromic surveillance systems, methodologies, new initiatives, and ISDS activities.

Tables
Topics and primary presenters are listed in the order they will appear.

Outbreak Investigator: Visualization tools for infectious disease management
Neil Abernethy, University of Washington Biomedical and Health Informatics

Public Health Community Platform
Markus Rennick, Association of State and Territorial Health Officials (ASTHO)

CDC BioSense
Richard Jones II, Centers for Disease Control and Prevention (CDC)

Praedico by Bitscopic
Payam Etminani, Bitscopic, Inc

Biosurveillance Ecosystem (BSVE)
Christopher Kiley, Defense Threat Reduction Agency (DTRA)

National Poison Data System
Royal Law, Centers for Disease Control and Prevention (CDC)

Mapping and Biosurveillance: Using ArcGIS
Natalie Jung, Esri, Inc.

FirstWatch
Todd Stout, FirstWatch Solutions, Inc.

The IMS Electronic Healthcare Data Warehouse
Silvia Valkova, IMS Health

SAGES: Suite for Global Electronic Biosurveillance
Sheri Lewis, Johns Hopkins University Applied Physics Laboratory (JHU-APL)

ESSENCE
Wayne Loschen, Johns Hopkins University Applied Physics Laboratory (JHU-APL)

Formation of Surveillance-Based User Group for R Language
Howard Burkam, Johns Hopkins University Applied Physics Laboratory (JHU-APL)

Social Media Analysis and Research Testbed (SMART) Demo
Michael Peddecord, San Diego State University Graduate School of Public Health

ICD-10-CM Transition Planning
David Swenson, State of NH, Division of Public Health Services

Joint Public Health Informatics Taskforce (JPHIT)
Amy Ising, UNC Chapel Hill/ISDS/JPHIT

Health Weight Surveillance Dashboard
Sean Mikles, University of Washington

ISDS Research Committee
Judy Akkina, USDA, APHIS, VS

Triple-S Project: Guidelines for implementing a syndromic surveillance system
Anne Fouillet, French Institute for Public Health Surveillance (InVS)

Project SHINE Training Opportunities
Meredith Lichtenstein, Council of State and Territorial Epidemiologists (CSTE)

ISDS Global Outreach Committee
Vivek Singh, Public Health Foundation of India
# Conference Day 1: Wednesday December 10, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Function</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Continental Breakfast and Satellite Meetings</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Welcome Remarks</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td><em>Richard Hopkins, MD, MSPH, ISDS</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Jim Buehler, MD, Health Commissioner, City of Philadelphia</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Ian Painter, MSc, PhD and José Lojo, MPH</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ISDS Scientific Program Committee Co-Chairs</td>
<td></td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Opening Keynote</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td><em>Ziad Memish, MD, FRCP, FACP, FIDSA,</em> Senior Consultant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adult Infectious Diseases, King Fahad Medical City</td>
<td></td>
</tr>
<tr>
<td>9:30 AM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>9:50 AM</td>
<td>Concurrent Session 1</td>
<td></td>
</tr>
<tr>
<td>11:10 AM</td>
<td>BREAK &amp; BOX LUNCH PICKUP</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>11:20 AM</td>
<td>Poster Session A and Networking Lunch</td>
<td>Columbus Ballroom Foyer</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>Concurrent Session 2</td>
<td></td>
</tr>
<tr>
<td>1:50 PM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>2:10 PM</td>
<td>Plenary Speaker</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td><em>Farzad Mostashari, MD, ScM</em> CEO and Co-Founder, Adelaide, Inc.*</td>
<td></td>
</tr>
<tr>
<td>2:40 PM</td>
<td>Rick Heffernan Award for Public Health Practice</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td><em>Joe Gibson, PhD, MPH,</em> Director of Epidemiology,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marion Country Public Health Department, Indiana</td>
<td></td>
</tr>
<tr>
<td>2:50 PM</td>
<td>Awards for Outstanding Research Articles in Biosurveillance</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td>Impact on Field of Biosurveillance: <em>Don Olson, MPH</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>New York City Department of Health and Mental Hygiene</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scientific Achievement: <em>Thibaut Jombart</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MRC Center for Outbreak Analysis and Modeling</td>
<td></td>
</tr>
<tr>
<td>3:30 PM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>3:50 PM</td>
<td>Concurrent Session 3</td>
<td></td>
</tr>
<tr>
<td>5:10 PM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>5:30 PM</td>
<td>Poster Session B</td>
<td>Columbus Ballroom Foyer</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>Reception</td>
<td>Columbus Ballroom Foyer</td>
</tr>
</tbody>
</table>
DAY 1 DETAILS

7:00 AM – 6:30 PM | Registration Open
Location: Grand Ballroom Foyer

7:00 AM | Continental Breakfast
Location: Grand Ballroom Foyer

7:00 AM | Satellite Meeting: Using Ontologies in Syndromic Surveillance
Location: Columbus Ballroom A
The use of ontologies allows researchers to define a common vocabulary to share information in a domain, create machine-interpretable definitions of the concepts, and model the relationships among them. Anyone interested in the use of ontologies to improve syndromic classification of health records is welcome to join us for an informal talk over breakfast.

8:00 AM | Welcome Remarks
Location: Grand Ballroom ABC
Presenters:
Richard Hopkins, MD, MSPH,
ISDS President and Board Chair
Dr. Hopkins has worked as a public health epidemiologist since 1977 and is a national leader in public health surveillance. He is currently an Adjunct Professor at the University of Florida and consults as a SME for CSTE and Florida DOH.

Jim Buehler, MD
Health Commissioner,
Philadelphia Department of Public Health
Dr. Buehler is currently on a leave of absence from his position as an adjunct professor at Drexel University School of Public Health in order to serve as the Health Commissioner for the City of Philadelphia.

Ian Painter, MSc, PhD
University of Washington,
ISDS Scientific Program Committee Co-Chair

José Lojo, MPH
Philadelphia Dept. of Public Health,
ISDS Scientific Program Committee Co-Chair

8:30 AM | Opening Keynote
Disease Surveillance during Mass Gatherings: Experience from the Hajj
Location: Grand Ballroom Foyer ABC
Ziad Memish, MD, FRCP, FACP, FIDSA
Dr. Ziad Memish is a senior consultant of Adult Infectious Diseases at King Fahad Medical City, Professor at the College of Medicine, Alfaisal University and Adjunct Professor at Rollins School of Public Health, Emory University.
Positions held include Director Gulf Cooperation Council States and WHO Collaborating Center for Infection Control, and KSA Deputy Minister of Health for Public Health.
He has served as a member of several international committees with WHO and ISID, and of numerous regional organizations. He established the National Infectious Diseases training program at the Saudi Council for Health Specialties. In November 2007, he was awarded “The King Abdulaziz Medal from the First Degree” – the highest award on a national level in Saudi Arabia for achievements in the field of infectious diseases and infection control.

9:30 AM | Break
Location: Grand Ballroom Foyer

9:50 AM | Concurrent Session 1
Location: See Concurrent Sessions Page 16

11:10 AM | Break & Lunch Pick-Up
Location: Grand Ballroom Foyer

11:20 AM | Poster Session A
Location: Columbus Ballroom Foyer
See page 31 for poster session details

12:30 PM | Concurrent Session 2
Location: See Concurrent Sessions Page 18

1:50 AM | Break
Location: Grand Ballroom Foyer
2:10 PM | Plenary Speaker
Location: Grand Ballroom ABC
Speaker: Farzad Mostashari, MD, ScM, CEO and Co-Founder, Aledade, Inc.

Dr. Farzad Mostashari was recently a Visiting Fellow at the Brookings Institution, where he was focusing on payment reform and delivery system transformation. He served from 2011-2013 as the National Coordinator for Health Information Technology where he coordinated US efforts to build a health information technology infrastructure for healthcare reform and consumer empowerment. During his tenure at the Office of the National Coordinator, including his two years as Principal Deputy, he led the implementation of the Health IT for Economic and Clinical Health (HITECH) Act. He also collaborated with the Centers for Medicare and Medicaid Services on the design and implementation of the “Meaningful Use” Incentive Program, in addition to programs for health information exchange, health IT workforce, research, and privacy and security.

2:40 PM | Rick Heffernan Award
Location: Grand Ballroom ABC
Awardee: Joe Gibson, MPH, PhD, Marion County Public Health Department

Joe is Director of Epidemiology at the Marion County Health Department in Indianapolis and an Affiliate Faculty member at the Indiana University School of Public Health-Bloomington. He has been named this year’s awardee in recognition of his outstanding contributions to the knowledge and practice of biosurveillance. For over 20 years, he has worked in public health and has been a champion of the development and use of public health informatics and biosurveillance. As Chair of the BioSense Governance Group for two years, Joe has worked tirelessly to ensure that the voice of the surveillance community is included in decision making and that the development of the system continues to move forward to meet user needs.

2:50 PM | Outstanding Research Articles in Biosurveillance Awards
Location: Grand Ballroom ABC

Impact on Field of Biosurveillance:
Don Olson, MPH New York City Department of Health and Mental Hygiene for the article: Reassessing Google Flu Trends Data for Detection of Seasonal and Pandemic Influenza: A Comparative Epidemiological Study at Three Geographic Scales

Scientific Achievement:
Thibaut Jombart, PhD MRC center for Outbreak Analysis and Modeling for the article: Bayesian Reconstruction of Disease Outbreaks by Combining Epidemiologic and Genomic Data

3:30 PM | Break
Location: Grand Ballroom Foyer

3:50 PM | Concurrent Session 3
Location: See Concurrent Sessions Page 20

5:10 PM | Break
Location: Grand Ballroom Foyer

5:30 PM | Poster Session B
Location: Columbus Ballroom Foyer
See page 30 for poster session details

6:00 PM | ISDS Poster Reception
Location: Columbus Ballroom Foyer
Everyone is invited!

ISDS Thanks ICF and HMS for Co-Sponsoring the 2014 Reception
<table>
<thead>
<tr>
<th>Time</th>
<th>Grand Ballroom D</th>
<th>Columbus Ballroom A</th>
<th>Columbus Ballroom B</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:50 – 10:10 AM</td>
<td><strong>What’s in Your Pocket? Trends in Mobile Apps for Biosurveillance and Decision-Making</strong>&lt;br&gt;Moderator: <strong>Victor Del Rio Vilas</strong>&lt;br&gt;<em>Pan American Health Organization</em>&lt;br&gt;Panelists: <strong>Courtney Corley</strong>&lt;br&gt;<em>Pacific Northwest National Laboratory</em>&lt;br&gt;<strong>César Escobar-Viera</strong>&lt;br&gt;<em>University of Florida</em>&lt;br&gt;<strong>Onicio Leal-Neto</strong>&lt;br&gt;<em>Epitrack</em>&lt;br&gt;<strong>Craig Taylor</strong>&lt;br&gt;<em>Cojengo</em></td>
<td><strong>Spatial Analysis when the Location of Infection is Uncertain: An Innovative Approach Using an Animal-Herd-Level Weighted Analysis</strong>&lt;br&gt;Emilie Gay&lt;br&gt;<em>ANSES- Laboratoire de Lyon</em></td>
<td><strong>Real-time laboratory-based influenza surveillance with Xpert Flu</strong>&lt;br&gt;Andrea Dugas&lt;br&gt;<em>Johns Hopkins University</em></td>
</tr>
<tr>
<td>10:10 – 10:30 AM</td>
<td>Mobile applications offer tremendous potential for collecting data for biosurveillance through participatory surveillance and the integration of new and traditional data streams. This panel features epidemiologists, data scientists, and technology partners who will address the full application lifecycle — from the assessment of the specific demand, resource, and technology specifications, to implementation and evaluation— of several innovative apps. Audience engagement using a new web app will gather input on other uses of mobile apps for data collection, visualization, and analysis. The panel and audience discussion will be compiled into guidance for future development of mobile apps for biosurveillance purposes to advance population health.</td>
<td><strong>Establishing a Plan of Action Implementing Integrated Disease Surveillance in Sudan</strong>&lt;br&gt;Hayat Khogali&lt;br&gt;<em>Sudan Federal Ministry of Health</em></td>
<td><strong>Wikipedia Usage Estimates Prevalence of Influenza-like Illness in Near Real-Time</strong>&lt;br&gt;David McIver&lt;br&gt;<em>Boston Children’s Hospital</em></td>
</tr>
<tr>
<td>10:30 – 10:50 AM</td>
<td><strong>Vetsyn: Veterinary Syndromic Surveillance Streamlined into One R Package</strong>&lt;br&gt;Fernanda C Dórea&lt;br&gt;<em>National Veterinary Institute, Sweden</em></td>
<td><strong>Surveillance to Manage Disease on Canadian Swine Farms</strong>&lt;br&gt;John Berezowski&lt;br&gt;<em>University of Bern, Switzerland</em></td>
<td><strong>Metagenomic Profiling and Identification of Antimicrobial Resistance Genes from Airborne Microbial Communities</strong>&lt;br&gt;Jonathan Jacobs&lt;br&gt;<em>MRIGlobal</em></td>
</tr>
<tr>
<td>10:50 – 11:10 AM</td>
<td><strong>ChatterGrabber: A Lightweight Easy to Use Social Media Surveillance Toolkit</strong>&lt;br&gt;James T Schlitt&lt;br&gt;<em>Virginia Polytechnic Institute</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveillance for Health Care Utilization</td>
<td>Syndrome Development, Natural Language Processing and Data Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columbus Ballroom C</td>
<td>Washington Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Using Hospital ED Data to Identify Mental Illness Trends After Hurricane Sandy</strong></td>
<td><strong>Classifying Supporting, Refuting, or Uncertain Evidence for Pneumonia Case Review</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ursula Lauper</td>
<td>Brett Ray South</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>New York State Department of Health</em></td>
<td><em>University of Utah</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9:50 – 10:10 AM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis of Healthcare Seeking Behavior</th>
<th>Identifying Emerging Novel Outbreaks In Textual Emergency Department Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrissy Dangel</td>
<td>Daniel B Neill</td>
</tr>
<tr>
<td><em>US Environmental Protection Agency</em></td>
<td><em>Carnegie Mellon University</em></td>
</tr>
<tr>
<td><strong>10:10 – 10:30 AM</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact of Demographics on Healthcare Utilization</th>
<th>Comparison of Three Critical Syndrome Classifications: Louisiana vs. BioSense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Walsh</td>
<td>Jenna Iberg Johnson</td>
</tr>
<tr>
<td><em>Health Monitoring Systems, Inc.</em></td>
<td><em>Louisiana Office of Public Health</em></td>
</tr>
<tr>
<td><strong>10:30 – 10:50 AM</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patterns of Care in Michigan Emergency Departments as Insurance Coverage Expands</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatema Mamou</td>
<td><strong>10:50 – 11:10 AM</strong></td>
</tr>
<tr>
<td><em>Michigan Department of Community Health</em></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Grand Ballroom D</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>12:30 – 12:50 PM</td>
<td><strong>Putting data linkage into FIRST gear: lessons from Firefighter Injury Research</strong></td>
</tr>
<tr>
<td></td>
<td>Moderator: <strong>Jennifer A. Taylor</strong></td>
</tr>
<tr>
<td></td>
<td>Drexel University School of Public Health</td>
</tr>
<tr>
<td></td>
<td>Panelists: <strong>Michael T. LeVaseur</strong></td>
</tr>
<tr>
<td></td>
<td>Drexel University School of Public Health</td>
</tr>
<tr>
<td></td>
<td><strong>Shannon A. Widman</strong></td>
</tr>
<tr>
<td></td>
<td>Drexel University School of Public Health</td>
</tr>
<tr>
<td></td>
<td><strong>Priya Sankar</strong></td>
</tr>
<tr>
<td></td>
<td>Drexel University Office of General Counsel</td>
</tr>
<tr>
<td></td>
<td><strong>Henry J. Costo</strong></td>
</tr>
<tr>
<td></td>
<td>Philadelphia Fire Department</td>
</tr>
<tr>
<td></td>
<td>The purpose of this panel is to describe the process of using data to develop firefighter nonfatal injury surveillance systems in the city of Philadelphia and the state of Florida through the linkage of data from workers’ compensation, inpatient and emergency department hospitalizations, human resources, and continuing education/training registries.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1:10 – 1:30 PM</td>
<td><strong>Evaluating cost and performance for improved meningitis disease surveillance in Chad</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30 – 1:50 PM</td>
<td><strong>Leveraging the Master Patient Index in Public Health Surveillance through Collaboration between Illinois Department of Public Health and the Illinois Health Information Exchange</strong></td>
</tr>
<tr>
<td></td>
<td>Stacey Hoferka, Illinois Department of Public Health</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury and Harm Surveillance</td>
<td>Cross-Jurisdictional Strategies</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Columbus Ballroom B</td>
<td>Columbus Ballroom C</td>
</tr>
<tr>
<td>Surveillance for Opioid Overdose in the Veterans Health Administration, 2004-2014</td>
<td>CDC Surveillance Strategy – A Strategy for Improving CDC Activities in Public Health Surveillance</td>
</tr>
<tr>
<td>Carla Winston</td>
<td>Chesley Richards</td>
</tr>
<tr>
<td>U.S. Department of Veterans Affairs</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>Assessment of National Poison Data System Algorithms to identify Public Health Events</td>
<td>Ebola, Enterovirus, MERS, Novel Flu, and other Challenges for Public Health Surveillance Practitioners</td>
</tr>
<tr>
<td>Royal Kai Yee Law</td>
<td>Alan Siniscalchi</td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention</td>
<td>State of Connecticut</td>
</tr>
<tr>
<td>Epidemiology of gunshot-related injuries in NYC emergency departments from 2004-2014</td>
<td>The Public Health Community Platform: Shared resources for enterprise solutions</td>
</tr>
<tr>
<td>Mansi Agarwal</td>
<td>Marcus Rennick</td>
</tr>
<tr>
<td>New York City Department of Health and Mental Hygiene</td>
<td>Association of State and Territorial Health Officials</td>
</tr>
<tr>
<td>Syndromic Surveillance of Motor Vehicle Crash Related Injuries in Nebraska</td>
<td>Overcoming operational differences to attain a national picture for novel threats</td>
</tr>
<tr>
<td>Sandra Gonzalez</td>
<td>Michael Coletta</td>
</tr>
<tr>
<td>Nebraska Department of Health and Human Services</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Use Cases Panel

**Grand Ballroom D**

**3:50 – 4:10 PM**

**Tractable Use Cases for Collaboration in Public Health Surveillance**

Moderator: **Howard Burkom**, Johns Hopkins Applied Physics Laboratory

Panelists:
- **Stacey Hoferka**, Illinois Department of Public Health
- **Caleb Wiedeman**, Tennessee Department of Health
- **Ramona Lall**, New York City Department of Health and Mental Hygiene
- **Michael Coletta**, Centers for Disease Control

This panel will expand the development process and use case collection of the ISDS Technical Convenons Committee, whose purpose is to bridge the gap between the analytic needs of public health practitioners and the expertise of the research community for the enhancement of disease surveillance. Panelists will present use cases of current and ongoing concern at local, state, and national levels. The audience will be prompted with questions on the relevance, aspects of common utility, technical feasibility, and data availability issues related to each use case, and derived or novel ideas will be solicited.

### Lightning Talks Session 2

#### Columbus Ballroom A

**3:50 – 4:10 PM**

- **Application of an Automated Surveillance System to Evaluate Outpatient Care of Pneumonia**
  - Jeneen Gifford, University of Maryland School of Medicine

- **Preparing Disease Surveillance Systems for ICD10**
  - Alimelu Jonnagadla, Johns Hopkins University Applied Physics Laboratory

- **Impact of Patient Self-Registration in EDs on Syndromic Surveillance Data**
  - Melinda Christine Thomas, Florida Department of Health

- **The French emergency department OSCOUR network: evaluation after a 10-year existence**
  - Anne Fouillet, French Institute for Public Health Surveillance (InVS)

- **Using syndromic surveillance data to describe chronic high frequency ED utilization**
  - Erin E Austin, Virginia Department of Health

- **Using a Syndromic Surveillance System to Evaluate Impact of Change in Alcohol Law**
  - Atar Baer, Public Health – Seattle & King County

- **Unintentional Drug Overdoses in Virginia: Analysis of Syndromic and Death Data**
  - Amanda Wahnich, Virginia Department of Health

- **Tracking HIV Post-Exposure Prophylaxis using Syndromic Surveillance in NYC Emergency Departments**
  - Stephanie Ngai, New York City Department of Health and Mental Hygiene

- **Enhanced Monitoring of Antiretroviral Resistance in Persons Living with HIV/AIDS**
  - James T Gomez, Houston Health Department, Bureau of Epidemiology

- **Design and Implementation of an Emergency Department (ED) Based Rapid HIV Screening Program**
  - Fredric Hustey, Cleveland Clinic

- **Potential Efficacy of Pregnancy Status on HIV Laboratory Reports**
  - Elliott Brannon, Tulane University School of Public Health and Tropical Medicine

- **Automated Collection of Electronic Health Record Healthy Weight Data for Surveillance**
  - Sean P. Mikles, University of Washington Schools of Medicine, Nursing and Public Health

- **Supplementing Obesity-Related Surveillance with Persistent Health Assessment Tools**
  - Meredith Keybl, MITRE Corporation
<table>
<thead>
<tr>
<th>Surveillance Policy</th>
<th>Surveillance for Respiratory and ILI Syndromes</th>
<th>Non-Infectious Disease Surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbus Ballroom B</td>
<td>Columbus Ballroom C</td>
<td>Washington Room</td>
</tr>
</tbody>
</table>

**Developing a Guidance Document to Improve Public Health Surveillance during Disasters**

Nicole Nakata  
ORISE Research Participant at CDC

**Ratio of Excess ED ILI Visits to Seroprevalence, Influenza A/H1N1 Infection, FL, 2009**

Richard Hopkins  
*University of Florida*

**Digital sources of food purchasing data for the surveillance of dietary patterns**

Katia Charland  
*McGill University*

**Unplanned school closures in the United States: evaluation of economic and social costs and consequences for students’ families**

Yenlik Zheteyeva  
*Centers for Disease Control and Prevention*

**An Early Warning Influenza Model using Alberta Real-Time Syndromic Data (ARTSSN).**

Paul Smetanin  
*RiskAnalytica*

**Using Ambulatory Syndromic Surveillance Data for Chronic Disease: A BMI Case Study**

Andrew Walsh  
*Health Monitoring Systems, Inc.*

**Advancing Epidemic Prediction and Forecasting: A New US Government Initiative**

Jean-Paul Chretien  
*Armed Forces Health Surveillance Center*

**Monitoring Respiratory Syncytial Virus Regionally in Children Aged < 5 Years Old Using Emergency Department and Urgent Care Center Chief Complaint Data in Florida’s Syndromic Surveillance System, Week 1, 2010 - Week 32, 2014**

Heather Rubino  
*Florida Department of Health*

**Developing a National Database of Radon Test Data in Collaboration with EPA: a Pilot Project to Ascertain Feasibility**

Carrie Eggers  
*Centers for Disease Control and Prevention*

**Keeping Public Health Surveillance Practice up to Speed: a Training Strategy to Build Capacity**

Kathleen Laberge  
*Public Health Agency of Canada*

**An Ecological Analysis of the Impact of Temperature Inversion on Emergency Department Visits for Respiratory Syndromes and Subsyndromes using BioSense 2.0 Frontend Data**

Anne Burke  
*Utah Department of Health*
## Conference Day 2: December 11, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Function</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Continental Breakfast</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>7:30 AM</td>
<td>ISDS Annual Meeting of Members</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td>Laura Streichert, PhD, MPH, ISDS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Richard Hopkins, MD, MSPH, ISDS, University of Florida</td>
<td></td>
</tr>
<tr>
<td>8:20 AM</td>
<td>Highlight on Ebola Response</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td>Kari Yacisin, MD, MSc, Centers for Disease Control and Prevention</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Don Weiss, MD, New York City Department of Health and Mental Hygiene</td>
<td></td>
</tr>
<tr>
<td>9:20 AM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>9:40 AM</td>
<td>Concurrent Session 4</td>
<td></td>
</tr>
<tr>
<td>10:40 AM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Roundtable Discussions</td>
<td></td>
</tr>
<tr>
<td>12:00 PM</td>
<td>BOX LUNCH PICK-UP</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>12:10 PM</td>
<td>Committee Meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research and Technical Conventions Committee</td>
<td>Columbus Ballroom A</td>
</tr>
<tr>
<td></td>
<td>Global Outreach and Public Health Practice Committees</td>
<td>Columbus Ballroom B</td>
</tr>
<tr>
<td></td>
<td>Conference Planning Committee</td>
<td>Columbus Ballroom C</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>1:10 PM</td>
<td>Concurrent Session 5</td>
<td></td>
</tr>
<tr>
<td>1:50 PM</td>
<td>BREAK</td>
<td>Grand Ballroom Foyer</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Closing Keynote</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td>Linda Rae Murray, MD, MPH, Cook County Department of Public Health</td>
<td></td>
</tr>
<tr>
<td>2:50 PM</td>
<td>Awards and Closing</td>
<td>Grand Ballroom ABC</td>
</tr>
<tr>
<td></td>
<td>Laura Streichert, PhD, MPH, ISDS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Richard Hopkins, MD, MSPH, ISDS</td>
<td></td>
</tr>
</tbody>
</table>
7:30 AM | Annual Meeting of Members
Location: Grand Ballroom ABC
Speakers:
Laura Streichert, MPH, PhD, ISDS
Richard Hopkins, ISDS (See bio on page 14)
Join new and long-time ISDS Members for the ISDS Annual Meeting of Member. ISDS President, Dr. Richard Hopkins, and Executive Director, Dr. Laura Streichert, will briefly review the Society’s current strategic plan, financial status, announcements, year accomplishments, and plans for moving forward. Meet the ISDS Board members and learn how you can help us to set a course for the future.

8:20 AM | Highlight on Ebola Response
Location: Grand Ballroom ABC
Don Weiss, MD, MPH, New York City Department of Health and Mental Hygiene
Don Weiss is a medical epidemiologist with the New York City Department of Health and Mental Hygiene (DOHMH). He is the Director of Surveillance for the Bureau of Communicable Disease including overseeing the Syndromic Surveillance Unit.
Don received his medical degree from the University of Medicine and Dentistry of New Jersey, completed a residency in pediatrics at the Albert Einstein College of Medicine/Montefiore Medical Center and received a Masters of Public Health in Epidemiology from St. Louis University School of Public Health. He was an urban pediatrician for seven years before switching careers to public health. Prior to joining DOHMH he taught infectious disease epidemiology at St. Louis University School of Public Health. Don has authored and contributed to several scientific articles and book chapters. He is also the author of two public health mystery novels.

Kari Yacisin, MD, MSc,
Centers for Disease Control and Prevention
Kari Yacisin is a CDC Epidemic Intelligence Officer assigned to the New York City Department of Health and Mental Hygiene. She attended medical school at Wake Forest University and received a Masters in Public Health from the London School of Tropical Medicine and Hygiene. She completed Internal Medicine residency at the University of Utah and an Infectious Disease fellowship at the University of New Mexico. This summer, she travelled to Ghana to assist CDC with the Ebola outbreak response.

9:20 AM | Break
Location: Grand Ballroom Foyer

9:40 AM | Concurrent Session 4
Location: See Concurrent Sessions Page 25

10:40 AM | Break
Location: Grand Ballroom Foyer

11:00 AM | Roundtables
Location: Grand Ballroom Foyer
See Page 26 for Roundtable Details

12:00 PM | Break and Lunch Pick-Up
Location: Grand Ballroom Foyer

12:10 PM | ISDS Committee Meetings
Location: Breakout Rooms
See page 27 for details on committee meetings and rooms

1:00 PM | Break
Location: Grand Ballroom Foyer

1:10 PM | Concurrent Session 5
Location: See Concurrent Sessions Page 28

1:50 PM | Break
Location: Grand Ballroom Foyer

2:00 PM | Closing Keynote
Location: Grand Ballroom ABC
Linda Rae Murray, MD, MPH, Cook County Department of Public Health
Dr. Murray has spent her career serving the medically underserved. She has worked in a variety of settings including practicing Occupational Medicine at a Workers Clinic in Canada, Residency Director for Occupational Medicine at Meharry Medical College, and Bureau Chief for the Chicago Department of Health under Mayor Harold Washington. Dr. Murray served as Medical Director of the federally funded health center, Winfield Moody, serving Cabrini Green Public Housing Project in Chicago. Dr. Murray has been an active member of a wide range of local and national organizations including serving as a member of the Board of Scientific Counselors for the Agency for Toxic Substances and Disease Registry (ATSDR), and the Board of Scientific Counselors for the National Institute of Occupational Safety and Health (NIOSH) and the Board of Directors of Trinity Health (a large Catholic Health system). She serves on the National Advisory Committee on Occupational Safety & Health (NACOSH).

2:50 PM | Awards and Closing
Location: Grand Ballroom ABC
<table>
<thead>
<tr>
<th>Collaboration Models Panel</th>
<th>Lightning Talks: Session 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Ballroom D</td>
<td>Columbus Ballroom A</td>
</tr>
</tbody>
</table>

### 9:40 – 10:00 AM

**Effective Collaboration Models for Statisticians and Public Health Departments**

**Moderator:** Howard Burkom  
**Johns Hopkins Applied Physics Laboratory**

**Panelists:**  
- Steve Rigdon  
  **Biostatistics, Saint Louis University**  
- Elena Naumova  
  **Department of Civil and Environmental Engineering, Tufts University**  
- Ian Painter  
  **University of Washington**  
- Yulia Gel  
  **University of Texas**

The session will explore past collaborations between the statistician panelists and public health departments to highlight approaches that have and have not been effective and to recommend effective, sustainable relationship strategies for mutual advancement of practical disease surveillance and relevant academic research. Panelists will describe experiences working with health departments, including actual applications as examples. Issues discussed will include requirements analysis, scoping technical problems for health department utility, adaptation of traditional statistical methods, and management of changing data environments. Panelists will derive advice for public health practitioners seeking help in forming relationships, framing problems, communicating results, and seeking funding.

**Development of Genomic Surveillance Bioinformatics Modules**

R. Chris Hopkins, Booz Allen Hamilton

**Utility and Acceptability of Influenza Surveillance amongst Emergency Providers**

Andrea Dugas, Johns Hopkins University

**Syndromic Surveillance of Respiratory Pathogens using Routine ED Data in England**

Helen Hughes, Public Health England

**Validation of Emergency Department and Outpatient Data Using ILI syndrome classifiers**

Jenna Iberg Johnson, Office of Public Health

**Inconsistency of timeliness in a chief complaint-based syndromic surveillance system during two influenza epidemic seasons**

Tao Tao, School of Public Health, Fudan University

**Geo-based Social Media Analytics and SMART dashboard for Tracking Influenza Outbreaks**

Michael Peddecord, San Diego State University

**Google Flu Trends: Spatial correlation with influenza emergency department visits**

Joseph Klembczyk, School of Medicine, Johns Hopkins University  
*2014 Award for Outstanding Student Abstract*

**Temporal Association between ILI and the Winter Holiday Break, U.S. 2004-2012**

Hongjiang Gao, Centers for Disease Control and Prevention

**The Impact of Weather on Influenza-like Illness Rates in Chicago**

Shital Shah, Rush University Medical Center

**Using ESSENCE-FL for Situational Awareness after National Reports of Increased Enterovirus D68 (EV-D68) Infections with Severe Outcomes, September 2014**

David Atrubin, Florida Department of Health
<table>
<thead>
<tr>
<th>Pertussis, Tuberculosis and Vaccinations</th>
<th>Designing Better Systems</th>
<th>Analytic Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Columbus Ballroom B</strong></td>
<td><strong>Columbus Ballroom C</strong></td>
<td><strong>Washington Room</strong></td>
</tr>
</tbody>
</table>
| Pertussis Surveillance in Veterans Affairs Medical Centers in Western United States – 2010-2014  
Patricia Schirmer  
*Department of Veterans Affairs* | Building a better syndromic surveillance system: the New York City experience  
Robert Mathes  
*New York City Department of Health and Mental Hygiene* | Demographic Health Analysis by Incorporation of Census Data with Patient Records  
Christopher Roman Cuellar  
*Johns Hopkins University Applied Physics Laboratory* |

| Tuberculosis Unseen - Missed Opportunities in Diagnosis | Public Health (PH) Preparedness: Improving Data Exchange for Monitoring PH Threats through Content Standardization  
Nikolay Lipskiy  
*Centers for Disease Control and Surveillance* | StarScan: A Novel Scan Statistic for Irregularly-Shaped Spatial Clusters  
Sriram Somanchi  
*Carnegie Mellon University, Event and Pattern Detection Laboratory* |
| Aaron C. Miller  
*University of Iowa* | Nikolay Lipskiy  
*Centers for Disease Control and Surveillance* | 10:00 – 10:20 AM |

| Documenting the Missed Opportunity Period for Influenza Vaccination in Office-based Settings | Towards a framework for data quality properties of indicators used in surveillance  
Ian Painter  
*University of Washington* | Transmission dynamics of seasonal influenza in Abidjan: Epidemiology and modeling  
Anderson Kouabenan N'gattia,  
*Institut National d’Hygiene Publique* |
| Joel Greenspan  
<table>
<thead>
<tr>
<th>Grand Ballroom D</th>
<th>Columbus Ballroom A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Engagement among the BioSense 2.0 User Group</td>
<td>How Should We Be Conducting Routine Analysis of Traditional Emergency Department Syndromic Surveillance Data?</td>
</tr>
<tr>
<td><strong>Roundtable Summary:</strong></td>
<td></td>
</tr>
<tr>
<td>This roundtable will provide a forum for the syndromic surveillance Community of Practice (CoP) to learn about activities of the BioSense 2.0 User Group (BUG) workgroups that address priority issues in syndromic surveillance. The goals of the workgroups are to coordinate efforts nationwide, better inform development of BioSense 2.0 to the Governance Group and CDC, and achieve high-quality outcomes for the practice of syndromic surveillance. Representatives from each workgroup will describe their efforts to date so participants can discuss key challenges and best practices in the areas of data quality, data sharing, onboarding, and developing syndrome definitions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Columbus Ballroom B</th>
<th>Columbus Ballroom C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized Surveillance: A Fresh Perspective for Regional Syndromic Surveillance</td>
<td>Economic Modeling of Syndromic Surveillance Systems – A Roundtable Discussion on Association of State and Territorial Health Official’s (ASTHO) Investment Decision Model</td>
</tr>
<tr>
<td><strong>Roundtable Summary:</strong></td>
<td></td>
</tr>
<tr>
<td>This roundtable will discuss successful syndromic surveillance data sharing efforts that have been used on a local scale for faster, more efficient, and long-term collaboration between neighboring public health jurisdictions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presenters:</th>
<th>Presenters:</th>
</tr>
</thead>
</table>
| Stacey Hoferka, *Illinois Department of Public Health (IDPH)* | David Atrubin, *Epidemiologist*  
| Marcus Rennick, ASTHO                      | Florida Department of Health  
|                                            | Michael Wiese, *Florida Department of Health in Hillsborough County* |

**Roundtable Summary:**
This roundtable will focus on how traditional emergency department syndromic surveillance systems should be used to conduct daily or periodic disease surveillance. As outbreak detection using these systems has demonstrated an equivocal track record, epidemiologists have sought out other interesting uses for these systems. Over the numerous years of the International Society for Disease Surveillance (ISDS) Conference, many of these studies have been presented; however, there has been a dearth of discussion related to how these systems should be used. This roundtable offers a forum to discuss best practices for the routine use of emergency department syndromic surveillance data.

<table>
<thead>
<tr>
<th>Presenters:</th>
<th>Presenters:</th>
</tr>
</thead>
</table>
| Nimi Idaikkadar, *New York Dept. of Health and Mental Hygiene* | Jane Blake, *Booz Allen Hamilton*  
| José Lojo, *Philadelphia Department of Public Health* | David Buckeridge, *Department of Medicine at McGill University*  
| Kristen Soto, *Connecticut Department of Public Health* | Bryant T. Karras, *State of Washington Department of Health*  
|                                            | Marcus Rennick, ASTHO                                                                                        |

**Roundtable Summary:**
ASTHO worked with Booz Allen Hamilton to create a decision model for syndromic surveillance investments. The model’s goal is to allow public health systems to compare and contrast different syndromic surveillance systems based on the value of information and return on investment. The roundtable will include a demonstration of the decision model, a review of how it can be used in practice, and a facilitated discussion covering its usefulness, applicability in the US and internationally, and potential future improvements. The roundtable will be moderated by two of the subject matter expert panel members who participated in its creation and the ASTHO project manager.
ISDS Committees
ISDS Committees are an exciting opportunity to connect and be engaged with colleagues in the biosurveillance community. Though the ISDS Committees you may stay involved with the community at multiple levels – from receiving e-mail updates to attending calls, and implementing project ideas or developing papers. **Whether you have been involved in a committee previously or not, all are invited to participate!**

Global Outreach and Public Health Practice Joint Meeting
**Location:** Columbus Ballroom B

Global Outreach Committee
The GOC aims to build a global network of surveillance professionals. It provides a forum for promoting international collaboration and support for disease surveillance in both developed and resource-poor settings. We are interested in establishing a cadre of across the globe. Join us to help develop new ways to build and sustain professional networks from the local to the global level.

Public Health Practice Committee
The PHP Committee strives to develop new ways to disseminate resources and best practices, provide professional development, and ensure that the priorities of practitioners are heard.

Research and Technical Conventions Joint Meeting
**Location:** Columbus Ballroom A

Research Committee
The committee promotes research in advanced disease surveillance by hosting webinars on research topics of interest and informal literature review discussions. Past activities have included administration of technical contests to stimulate interest from other research disciplines and furnishing of reviewers and award judges for the Society’s annual conference.

Technical Conventions Committee
The mission of the ISDS Technical Conventions committee is to facilitate and expedite the development, evaluation, and implementation of technical methods for public health surveillance.

Scientific Planning Committee
**Location:** Columbus Ballroom C
The ISDS Conference is the work of many dedicated surveillance professionals that plan the conference to disseminate the latest in surveillance research and practice and to foster innovation through cross-sector interactions.

Be part of the Society!
**Join/Renew Your Membership!**

As a member of ISDS, you strengthen the Society’s ability to:

- Give voice to the priorities and practices of the surveillance community to decision makers at all levels.
- Facilitate peer-to-peer networking through communities of practice (CoPs).
- Foster innovations in surveillance research and practice.
- Provide support and technical expertise.
- Serve as an up-to-date informational resource on disease surveillance.
- Build workforce competencies through education and training in surveillance.
- Convene the ISDS Annual Conference and publish abstracts.

Members Benefit From:

- Discounted conference rates.
- Subscription to the ISDS monthly e-newsletter.
- Discounted publication rates in the *Emerging Health Threats Journal.*
- Ability to post announcements on www.syndromic.org.
- Voting and nomination privileges in ISDS Board elections.
- Ability to run for and hold positions on the ISDS Board.
- Building a network of colleagues.
- Professional development opportunities.
- Leadership and volunteer opportunities.
Panel

Grand Ballroom D

1:10 – 1:30 PM

Digital Disease Detection Dashboard: Rapid Visual Detection & Outbreak Management Tool

Moderator: Karina N Alvarez
Booz Allen Hamilton

Panelists: Dimitrios Koutsonanos
Booz Allen Hamilton
KC Decker
Booz Allen Hamilton
Catherine Ordun
Booz Allen Hamilton

The Digital Disease Detection Dashboard (D4) provides an analytics environment to conduct hypothesis testing, hot spot geolocations, and forecasting in a centralized dashboard. Methods such as linear regression, LOESS, and SIR modeling are implemented R, an open-source programming language. Visualizations utilize Javascript libraries and are rendered using R-Shiny. Currently, D4 contains 15 epidemiological datasets from the CDC including foodborne illness cases, influenza patient counts and positive lab confirmations, and unconventional public health data like weather data. D4’s objective is to use powerful statistical models and rigorous visualizations to analyze multivariable associations to specific outcomes using open source code.

Cross Cutting Session 1

Columbus Ballroom A

1:30 – 1:50 PM

Military Real-time Syndromic Surveillance System for Biosurveillance Portal in Korea

ChulWoo Rhee
Armed Forces Medical Command

A Term-based Approach to Asyndromic Determination of Significant Case Clusters

Howard Burkom
Johns Hopkins Applied Physics Laboratory

Congratulations to the Winners of the 2014 Award for Outstanding Student Abstracts

Joseph Klembczyk
Johns Hopkins University School of Medicine:
’Google Flu Trends: Spatial correlation with influenza emergency department visits.’

Joseph Klembczyk studied engineering as an undergraduate at University of Virginia. He is currently an MD/MPH student at Johns Hopkins University School of Medicine and will graduate in May 2016. His current research involves surveillance and prediction of influenza using Google Flu Trends, and he is broadly interested in using data science for surveillance in the emergency department. Joseph will apply to residency in Emergency Medicine following medical school, and continue to contribute to public health research.

See Joseph’s Presentation During Concurrent Session 4, Columbus Ballroom A
### Concurrent Session 2

<table>
<thead>
<tr>
<th>Cross Cutting Session 2</th>
<th>Preparing for Transitions</th>
<th>Cross Cutting Session 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbus Ballroom B</td>
<td>Columbus Ballroom C</td>
<td>Washington Room</td>
</tr>
<tr>
<td><strong>Challenges in Surveillance for Chikungunya Virus (CHIKV) Infection</strong>&lt;br&gt;Cynthia Ann Lucero-Obusan&lt;br*Department of Veterans Affairs, Office of Public Health**</td>
<td><strong>Preparing for the Impact of the ICD-9/10 Transition on Syndromic Surveillance</strong>&lt;br&gt;Peter Hicks&lt;br*Center for Disease Control and Prevention**</td>
<td><strong>Electronic Health Records and Environmental Public Health Tracking</strong>&lt;br&gt;Gonzá Namulanda&lt;br*Centers for Disease Control and Prevention**</td>
</tr>
<tr>
<td><strong>An Evaluation of the Biosense 2.0 &quot;Poisoning by Medicines&quot; Syndrome Using Chief-Complaint Data in Utah</strong>&lt;br&gt;Anne Burke&lt;br*Utah Department of Health**</td>
<td><strong>Preparing for ILINet 2.0</strong>&lt;br&gt;Joel Greenspan&lt;br*Martin, Blanck &amp; Associates**</td>
<td><strong>Game Plan: Communicable Disease Surveillance for Super Bowl XLVIII – New Jersey, 2014</strong>&lt;br&gt;Teresa Hamby&lt;br&gt;New Jersey Department of Health and Mental Hygiene **</td>
</tr>
</tbody>
</table>

### Felicia Trembath, Purdue University

**'An Analysis of the Challenges and Possible Solutions for Dog Bite Injury Surveillance.'**

Felicia is currently a fellow with the Health Systems Integration Fellowship Program through CDC/CSTE and is a Ph.D. candidate in the Comparative Pathobiology Department at Purdue University. As a HSIP Fellow, Felicia is stationed in Maricopa County Arizona and is working on several projects focused on integrating health information across different health systems. At Purdue, Felicia worked with Dr. Alan Beck on the development of the public portal for the Human Animal Bond Research Institute and conducted research on the impact of guidelines issued by professional organizations on vaginal birth after a cesarean delivery. Prior to attending Purdue University to continue her education, Felicia worked with Americorps as a Vista Volunteer in Sheridan, Wyoming. During her tenure with Americorps, Felicia worked with the Coordinated School Health Program to develop healthy school teams at local schools and administer the fluoride rinse program to elementary students. Preceding this, Felicia worked with the Wyoming Department of Health as a field epidemiologist stationed in Sheridan, Wyoming. Felicia received her Master in Public Health at Purdue University and a Bachelors of Science in Community Health Education from Brigham Young University.

See Felicia’s Presentation During Concurrent Session 2, Columbus Ballroom A
1. Follow-up of Breast Cancer Patients in Ghana: Challenges to Community-based Surveillance  
   Dennis Odai Laryea  
   Komfo Anokye Teaching Hospital, Ghana

2. *Helicobacter pylori* Prevalence in Symptomatic and Asymptomatic Children in Georgia  
   Neli Chakvetadze  
   National Center for Disease Control

3. Combining Text Mining and Data Visualization Techniques to Understand Consumer Experiences of Electronic Cigarettes and Hookah in Online Forums  
   Mike Conway  
   Department of Family and Preventive Medicine, University of California San Diego

4. Childhood Injury in Wake County, NC: Local Use of Public Health Surveillance Data  
   Anna E Waller  
   University of North Carolina-Chapel Hill

5. Public Health Surveillance: Challenges and Solutions for the Road Ahead in India  
   Lipika Nanda  
   Indian Institute of Public Health Bhubaneswar

6. Using an Emergency Departement Syndromic Surveillance System to assess the impact of cyclone Bejisa, Reunion Island  
   Pascal Vilain  
   Regional Office of French Institute for Public Health Surveillance in Indian Ocean

7. Now Trending in Your Community: Social Media Insights For Your Public Health Mission  
   Diana M Kushner  
   Department of Health and Human Services

8. Development of Mental Health Classification Related to Severe Weather Events  
   Alvin F Chu  
   New Jersey Department of Health

9. Carbon Monoxide Poisoning during Hurricane Sandy in Affected New York State Counties  
   Jian-Hua Chen  
   New York State Department of Health

    Helen Hughes  
    Public Health England

    Priyanka Parmar  
    Public Health Foundation of India

12. Using SAGES OpenESSENCE for Mass Gathering Events  
    Richard Wojcik  
    Johns Hopkins University Applied Physics Lab

13. Development of the multiplex PCR for detection of the DNA-contained emergent diseases agents in pigs (African swine fever, Aujeszky disease, Circoviral disease)  
    Anton Gerilovsky  
    NSC IECVM

14. Validation of multiplex PCR for detection and differentiation of Salmonellas  
    Iryna Gerilovsky  
    NSC IECVM

15. Statistical Monitoring of Condemnations from Slaughterhouses  
    Flavie Vial  
    Veterinary Public Health Institute

16. A Novel Zoonotic Disease Course Outbreak to improve Surveillance and Response for the USDA  
    Julianna B Lenoch  
    Wisconsin Department of Health Services

17. Assessment of several algorithms for outbreak detection using bovine meat inspection data for syndromic surveillance: a pilot study on whole carcass condemnation rate  
    Emilie Gay  
    ANSES - Laboratoire de Lyon

18. Outbreak prediction: aggregating evidence through multivariate surveillance  
    Flavie Vial  
    Veterinary Public Health Institute

19. Monitoring emergent avian influenza viruses subtypes H5 and H7 in wild birds in Ukraine  
    Borys Stegni  
    NSC IECVM

20. Field Lessons from a Zoonotic Disease Study in Nairobi Health Surveillance System  
    Djesika D Amendah  
    African Population and Health Research Center

21. Standardising Syndromic Classification in Animal Health Data  
    Fernanda C Dórea  
    National Veterinary Institute

22. Response of the National Biosurveillance Integration Center to the Emergence of Porcine Epidemic Diarrhea Virus in the United States  
    Yandace Khateri Brown  
    National Biosurveillance Integration Center
23. Anthropology and Ecohealth Research in Control of Diseases for Pastorals in Tanzania
   Peter Ernest Mangesho
   *Department of Family and Preventative Medicine, University of California San Diego*

24. Monitoring trends of self-diagnosis in New York City emergency departments
   Alyssa Zora Chase
   *New York City Dept. of Health and Mental Hygiene*

25. Using ESSENCE-FL for Situational Awareness after National Reports of Increased Enterovirus D68 (EV-D68) Infections with Severe Outcomes, September 2014
   David Atrubin
   *Florida Department of Health*

26. Evaluation of an electronic smart-card based school absenteeism surveillance system
   Eric H.Y. Lau
   *The University of Hong Kong*

27. Evaluating the Utility of HealthMap as a Supplementary Surveillance Tool
   Melinda C. Thomas
   *Florida Department of Health*

28. Using Emergency Department Data for Detection of a Synthetic Marijuana Outbreak
   Lourdes W.H. Yun
   *Denver Health and Hospitals*

29. Application of Syndromic Surveillance to Describe Gunshot-related Injuries in Houston
   Ryan M. Arnold
   *Houston Dept. of Health and Human Services*

30. Using NC DETECT for Comprehensive Morbidity Surveillance on Poisoning and Overdose
   Amy Ising
   *University of North Carolina Chapel Hill*

   Alyssa Zora Chase
   *NYC Department of Health*

32. A Syndrome Definition Validation Approach for Ebola Virus Disease
   Michael J. Waddell
   *Pangaea Information Technologies*

33. Monitoring acute diarrhea via an electronic surveillance system in the Peruvian Navy
   Emily Alsentzer
   *Stanford University*

34. Surveillance on hand, foot, and mouth disease in East Asia
   Ta-Chien Chan
   *Research Center for Humanities and Social Sciences, Academia Sinica*

35. Cholera Public Health Surveillance System in Cameroon
   Moise Chi Ngwa
   *Emerging Pathogens Institute*

36. Using Twitter to Detect and Investigate Disease Outbreaks
   David Marchette
   *Naval Surface Warfare Center*

37. A Syndromic Surveillance Service Supporting Environmental Public Health Incidents
   Helen Hughes
   *Public Health England*

38. Determinants of daily attendances in emergency departments for asthma in Paris area
   Anne Fouillet
   *French Institute for Public Health Surveillance*

39. Computational Method for Epidemic Detection in Multiple populations
   Ekaterina Shatskikh
   *UC Santa Barbara*

40. The Application of a Novel Statistical Method for Syndromic Surveillance in England
   Helen Hughes
   *Public Health England*

41. Modeling spatial heterogeneity with excess zeroes from school absenteeism data
   Xiaoxiao Song
   *Fudan University, China*

42. Spatial CUSUM Chart Based Method for Rapid Detection of Outbreaks
   Sesha Kalinda Dassanayaka
   *University of Colorado Denver*

43. Creating a Local Geographic Influenza-like Illness Activity Report
   Shital Shah
   *Rush University Medical Center*

44. Detecting outbreaks in time-series data with RecentMax
   Dave Carter
   *National Research Counsel Canada*
45. Comparison of ILINet and ESSENCE for Influenza Surveillance at the Local Level
   **Gregory Dany luk**
   *Florida Dept. of Health, Seminole County*

46. A Comparison of Fever Classified Chief Complaints and Diagnoses with Recorded Body Temperatures
   **Patricia Araki**
   *County of Los Angeles, Dept. of Public Health*

47. Spatial clustering of I LI in Yunnan Province, China, based on geographical information system
   **Xia Xiao**
   *Kunming Medical University*

48. Fever in children - an assessment on validity by Shewhart mode in a syndromic surveillance in China
   **Changming Zhou**
   *Fudan University*

49. Influenza Surveillance in Mozambique: Results and challenges from the first year of implementation
   **Almiro Rogério Tivane**
   *National Institute of Health*

50. Epidemiological inferences using public information, influenza H7N9 epidemic in China
    **Eric H.Y. Lau**
    *University of Hong Kong*

51. An Exploration of the H1N1 Outbreak in Champaign and Urbana Elementary Schools
    **Ian Brooks**
    *University of Illinois*

52. Adjustment for Baseline Level of Dengue Cases Due to Increased Testing in Singapore
    **Li Wei Ang**
    *Ministry of Health*

53. Dry climate as a predictor of Chagas’ disease irregular clusters: a covariate study
    **Luiz H Duczmal**
    *Universidade Federal de Mina*

54. Social mobilization dengue hemorrhagic vector control and sustainability in Indonesia
    **Rizanda Machmud**
    *Andalas Univeristy*

55. Integrated disease surveillance to reduce data fragmentation – An application to malaria control
    **Kate Zinszer**
    *McGill University*

56. HIV Surveillance: Life Skills Education Programme among in-school Adolescents
    **Olubunmi Adeyemi**
    *Public Health Department, Nigeria*

57. Timeliness of Chlamydia Laboratory and Provider Reports: A Modern Perspective
    **Patrick T.S. Lai**
    *Indiana University*

58. Identifying Congenital Syphilis Cases through a Birth Registry Match
    **Elliott Brannon**
    *Louisiana Department of Health and Hospitals*

59. Spatial Distribution of Adolescents with Sexually Transmitted Infections Diagnosed in the Pediatric Emergency Departments of Washington, DC
    **Shilpa Patel**
    *Children’s National Medial Center*

60. Pre ART mortality and its determinants in Tanzania public driven HIV Care program
    **Bonita Kokugonza Kilama**
    *Tanzania National AIDS Control Program*

61. Use of Administrative Health Care Data for Sexually Transmitted Disease Surveillance
    **Elaine W. Flagg**
    *Centers for Disease Control and Prevention*

62. Evaluating Ascertainment of Hepatitis C Cases and Deaths by Electronically Linking Surveillance and Vital Statistics Data in Utah
    **Anne Burke**
    *Utah Department of Health*

63. Leveraging the Laboratory Response Network: A Step Toward Implementing IHR (2005)
    **Tyler Wolford**
    *Association of Public Health Laboratories*

64. Tracking Communicable Disease Electronic Laboratory Data in New York State
    **Candace M Noonan-Toly**
    *NYS Department of Health*

65. Comparison between HL7 and Legacy Syndromic Surveillance Data in New York City
    **Janette Yung**
    *NYC Department of Health and Mental Hygiene*

66. Validation of New Jersey Emergency Department (ED) Registration Data in BioSense 2.0
    **Feiyen Chen**
    *New Jersey Department of Health*

67. So Long and Thanks for All the EARS: Lessons Learned from Tennessee’s Ongoing Syndromic Surveillance Transition
    **Caleb Wiedeman**
    *Tennessee Department of Health*
68. Assessing the work practices and information needs of disease investigators  
   **Neil Abernethy**  
   *University of Washington*

69. Development of an Infectious Disease Surveillance Framework at Public Health Ontario  
   **Brenda Lee**  
   *Public Health Ontario*

70. Justification for Transitioning to an Electronic Disease Notification System  
   **James N. Blackwell**  
   *Tarrant County*

71. User-Customizable Health Pattern Detector Framework: Twitter Analysis Example  
   **Lianna Maria Hall**  
   *MIT Lincoln Laboratory*

72. School health: A novel school nurse clinic surveillance project in coastal Georgia  
   **Amanda Feldpausch**  
   *CDC/CSTE*

73. Improving local noncommunicable disease surveillance within a changing data environment  
   **Allison Young**  
   *Orange County Health Department*

74. Methodology of Epidemic Risk Management in Kazakhstan with Open-Source EIDSS  
   **Alexey Burdakov**  
   *Black & Veatch*

   **Lahiru Sandaruwan Galgamuwa**  
   *University of Peradeniya*

76. Application of innovative data analytical approach to assess disease situation during crises in Somalia, Yemen and Pakistan  
   **Kamran Ahmed**  
   *World Health Organization EMRO*

77. Evaluation of Praedico™, A Next Generation Big Data Biosurveillance Application  
   **Mark Holodniy**  
   *Department of Veterans Affairs*

78. An Integrated System for Enteric Disease Surveillance and Outbreak Detection  
   **Kristen Soto**  
   *Connecticut Department of Public Health*

79. A Semantic Web Platform for Online Vaccine Sentiment Surveillance  
   **Arash Shaban-Nejad**  
   *University of California*

   **Jennifer Vahora**  
   *Illinois department of Public Health*

81. Reciprocal data sharing: Sending monthly summary reports of syndromic data to ED  
   **Anthony Waiyee Tam**  
   *New York City Dept.of Health and Mental Hygiene*

82. Where do you find interesting biosurveillance publications?  
   **Katie J Suda**  
   *Department of Veteran Affairs/UIC*

83. Surveillance of Surveillance: Inventoring Gaps and Commonalities Across the Universe of Surveillance Systems  
   **Catherine Ordun**  
   *Booz Allen Hamilton*

84. Return to Public Health- Undeliverable letters of Communicable Disease Patients  
   **Uzay Kirbiyik**  
   *IU Richard M. Fairbanks School of Public Health*

85. Preparing for State Health Department Accreditation: Pivotal Roles for Public Health Surveillance  
   **Christopher D. Williams**  
   *University of Illinois at Chicago*

86. Validation of the Michigan’s Public Health Syndromic System Using Electronic Health Records  
   **Sandhya Swarnavel**  
   *Michigan Department of community Health*

---

**Complete the Evaluation for the 2014 ISDS Conference!**

2015 ISDS Conference

Join us next year in Denver, Colorado!