出國報告（出國類別：其他-國際會議）

2011 年第 10 屆國際傳染病監測學會年會：建立公共衛生監測的未來

服務機關：行政院衛生署疾病管制局

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派赴國家：美國

出國期間：100 年 12 月 4 日至 100 年 12 月 11 日

報告日期：101 年 1 月 18 日

摘　　要

　　由國際傳染病監測學會（International Society for Disease Surveillance；ISDS）所主辦之 2011 第十屆年會於 12 月 6 日至 8 日假美國喬治亞州亞特蘭大舉行，該學會每年皆針對傳染病監測議題舉辦研討會，過去已舉辦九次，今年為第十屆，是由國際傳染病監測學會（ISDS）所籌劃，ISDS 是一個非營利性組織，成立於 2005 年，其致力於推動疾病監測的科學實踐以改善人口健康，該學會擁有 300 多名成員及專家，專業和學科領域包含：公共衛生監測、臨床實踐、衛生信息、衛生政策及其他國家和全球衛生監控 。世界各國對此年會亦積極與會，來自世界各國專業領域人員參與，共同進行經驗交流與新知分享。

　　本屆年會主題為建構公共衛生監測的未來，次項會議主題分為四類：分析方法、公共衛生實踐、訊息及新方法。

　　本屆年會中,本局陳助理研究員沛蓉與會報告運用死亡通報資料建立台灣肺炎及流感死亡率即時監測及經驗,此外並選擇參加與監測業務相關之會議主題及演講,由於大會議程的時間安排,故同一個時段會有多項會議主題及不同演講同時進行,無法同時參與,建議未來在經費許可之前提下,鼓勵同仁參與國際盛會,除獲取相關傳染病監測新知外,得以研究學習國際之傳染病監測及調查模式,與各國公共衛生專家進行交流，以提升我國疾病監測技能及國際合作。

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目　的

一、 參加 2011 年第 10 屆國際傳染病監測學會年會，觀摩研究方法及知識。

二、 進行一篇運用死亡通報資料建立台灣肺炎及流感死亡率即時監測口述
論文發表。

過　程

100 年 12 月 4 日晚上 11 點 25 分由台灣桃園國際機場搭乘中華航空班機，於當地時間 12 月 4 日下午 6 點 25 分抵達美國舊金山國際機場進行轉機，12 月 4 日下午 10 點 00 分由美國舊金山國際機場搭乘達美航空班機，於 12 月 5 日早上 5 點 25 分抵達美國亞特蘭大國際機場。

第一天：12 月 6 日

本日舉行的是建立公共衛生監測的會前會，會議議程同時有三個主題進行，包含公共衛生症狀監測系統的訓練及展示、如何使用遊戲工具增進疾病監測效益及調查的能力和如何使用公開的軟體資源達到國際間疾病監測資料的空間分析。本人參加的是公共衛生症狀監測系統的訓練和展示（Public Health Syndromic Surveillance Systems Training and Demonstrations），這個課程主要參加的學員背景多為醫療保健和公共衛生專業人員，是一個症狀監測入門的概論課程，上午以演講的形式分別展示幾個各州發展或是建置中的症狀監視系統。

下午則開放學員與上述症狀系統的建置團隊自由討論的機會，使學員熟悉症狀監測系統的基本原則、方法、使用時機和該系統所面對的挑戰和比較其與傳統公共衛生監測系統的差異。

依據 Larissa M.在大會中的報告指出傳統公共衛生監測是以確診病例做為疫情爆發之監測依據，但往往受限於需等待實驗室確認的時間，無法快速做出疫情應變的反應，症狀監測即在利用一些廣義的症狀資料資料例如非處方藥物的銷售量（Over the counter medication sales）、護理求助專線進線量（Nurse advice lines）、911 求助專線進線量(911 calls)工作和學校缺席人數（Work and school absenteeism）或急診室求診之病患量（Emergency department visits）等等，利用這些資料能早期監視異常情形，提醒衛生單位即時介入有效措施，以降低疾病發生率和死亡率，減少經濟損失。

	Track 1: *Public Health Syndromic Surveillance Systems: Training & Demonstrations*	Track 2: *Using Gaming Tools to Train Disease Surveillance Professionals & Investigate Next-Generation Capabilities*	Track 3: *Spatial Analysis of International Surveillance Data Using Open-Source Software*
7am :00 :15 :30 :45	Continental Breakfast *(7am - 8am)*		
8am :00 :15 :30 :45	Pre-Conference Introduction *(8am - 8:15am)*		
	Syndromic Surveillance 101 Course *(8:15am - 9:30am)*	**Introduction to game-based tools - All** *(8:15am - 10:30am)*	**Introduction to Spatial Epi and stats, GIS, and GIS software** *(8:15am - 9:15am)*
9am :00 :15 :30	**Break**		**Hands-on GIS Session 1** *(9:15am - 10:30am)*
:45	**Surveillance System: NCDETECT** *(9:45am - 10:30am)*		
10am :00 :15 :30	**Break**	**Break**	**Break**
:45	**Surveillance System: EpiCenter** *(10:45am - 11:45am)*	**Epidemiological Disease Investigation Game (EpiDIG) - Group 1** *(10:45am - 12:45pm)*	**Hands-on GIS Session 2** *(10:45am - 12:45pm)*
11am :00 :15 :30 :45			
12pm :00 :15 :30	**Surveillance System: ESSENCE** *(11:45am - 12:45pm)*		
:45	Lunch *(12:45pm - 1:30pm)*	Lunch *(12:45pm - 1:30pm)*	Lunch *(12:45pm - 1:30pm)*
1pm :00 :15 :30			
:45	**Surveillance System: BioSense** *(1:30pm - 2:30pm)*	**EpiDIG - Group 2** *(1:30pm - 3:30pm)*	**Hands-on GIS Session 3** *(1:30pm - 2:30pm)*
2pm :00 :15 :30 :45	**Swap Meet** *(2:30pm - 5:00pm)*		**Swap Meet** *(2:30pm - 5:00pm)*
3pm :00 :15 :30 :45			
4pm :00 :15 :30 :45		**Swap Meet** *(2:30pm - 5:00pm)* *Overlaps with Group 2 game-play*	

第二天：12 月 7 日

大會於今天早上由 ISDS 董事會主席 Dr. David Buckeridge 開幕，本屆年會主題為建構公共衛生監測的未來，其中細分會議主題為四大類，包含：分析方法、公共衛生實踐及訊息及新方法。上午的 Novel Technology Lecture 分別邀請愛荷華保健大學的 Dr. Philip Polgreen、Pennsylvania 州立大學的 Dr. Marcel Salathe、美國 CDC 的 Dr. Taha Kass-Hout 及全球衛生威脅基金會的 Dr. Mark Smolinski，分別就分析 Analytical Methods、Public Health Practice、Informatics 及 Novel Approaches 進行專題演講，內容闡述公共衛生監測領域中有關監測方法和分析方法新的進步，會中以免費社交軟體 Tweeter 網站上收集自願通報 Flu 資料為例，說明部分地區 Tweeter 收集的流感監測資料趨勢與 CDC

監測資料非常一致。公共衛生實踐論壇的重點則放在如何改善日常監測、疫情調查及管理和應變的過程。

由 ProMED 的創辦主席 Dr. Stephen Morse 就"Global Surveillance for Emerging Infectious Disease"主題，進行 Plenary Talk 演說，內容提及新興傳染病及再浮現傳染病疫情反撲的嚴重性及全球化的趨勢、創辦 ProMED 的理念及將 ProMED 以 Email 方式免費提供給的挑戰外，演說最後也提出短程與中長程之因應策略。

訊息論壇（Informatics）的重點則是放在電子化的健康資訊運用上，在技術方面如何分析、交換及協助系統流程運作。新方法論壇（Novel Approaches）則著眼於如何應用用廣泛的監測方法來超越傳統的傳染病監測方法，美國感染症醫學會（IDSA）Emerging Infections Network 主任 Dr. Philip Polgreen，提及除了傳統的醫院流行病學方法學以外，目前正與跨領域的研究人員運用定量方法（例如，Google 或 Tweeter 社交網絡，時間序列方法），並嘗試在傳染病領域解決疾病監測及群聚擴散的問題，他同時也是本次大會 Novel Technologies Panel，其表示公共衛生監測上最新發展出來的方法通常都不是最好的方法，該如何透過這些新的監測方法，幫助人們改變行為以降低疾病的發生率及死亡率，本論壇即因應此主題，從醫學、公衛、資訊各個不同角度，論述獲取特定監測資料後該如何進行公共衛生的介入，會中有人提問，現在的新方法都著重在透過網際網路主動收集資料，但是對於不使用網際網路的特定族群，在新的監測方法上該如何去掌握該群人的狀況，與會學者專家亦踴躍提問，會議互動熱烈且精彩。

iSDS

INTERNATIONAL SOCIETY for DISEASE SURVEILLANCE

10th Annual Conference Agenda
Building the Future of Public Health Surveillance
Sheraton Atlanta Hotel
Atlanta, GA

Wednesday, December 7, 2011

Time	Event
7:30 AM	**Continental Breakfast**
8:30 AM	**Welcome Remarks** David Buckeridge, *ISDS Board President*
8:40 AM	**Scientific Program Co-Chair Remarks** Daniel Neill, *Carnegie Mellon University* Karl Soetebier, *Georgia Department of Public Health*
9:00 AM	**Plenary Speaker** Stephen Morse, *Co-Director, PREDICT – USAID EPT Program*
9:30 AM	**Keynote Address** Farzad Mostashari, *National Coordinator for HIT, ONC, U.S. HHS*
10:15 AM	*Break*
10:30 AM	**Novel Technologies Panel** Philip Polgreen, *University of Iowa Health Care* Marcel Salathe, *Pennsylvania State University* Taha Kass-Hout, *Centers for Disease Control and Prevention* Mark Smolinski, *Global Health Threats, Skoll Global Threats Fund*
11:30 AM 11:45 AM	**Lunch and Poster Viewing** Affiliate Meetings *ISDS Distribute Community of Practice* *Global Health Informatics Community Meeting*
12:30 PM	ISDS Town Hall Meeting David Buckeridge, *ISDS Board President* Laura Streichert, *ISDS Executive Director*
1:00 PM	**Concurrent Session 1**
2:20 PM	*Break*
2:40 PM	**Concurrent Session 2**
4:00 PM	*Break*
4:20 PM	**Concurrent Session 3**
5:40 PM	*Break*
6:00 PM	**Poster Session and Reception**

Concurrent Session 1: Wednesday, December 07, 2011 01:00 PM - 02:20 PM				
	Time Series Analysis	**Non-infectious Disease Surveillance**	**Data Quality and Standards**	**Event Surveillance 1**
01:00 - 01:20 PM	Sufficient reduction methods for multivariate surveillance **Sawaporn Siripanthana**	Novel approach to hypoglycemia surveillance in an international online diabetes social network **Elissa Weitzman, ScD, MSc**	Visualizing Data Quality: Tools and Views **Ian Painter, PhD**	Natural Disasters and Use of Syndromic Surveillance: Austin, Texas Metro Area 2011 **Judy Henry, PhD**
01:20 - 01:40 PM	Mining Intensive Care Vitals for Leading Indicators of Adverse Health Events **Rajas Lonkar, Masters in Information Systems Management**	Using injury surveillance to assess sport and recreation-related heat illness **Ellen Yard, PhD**	Monitoring and auditing the transfer of syndromic surveillance data to ensure data completeness **Zachary Faigen, MSPH**	Operation of the evacuation site surveillance for the Great East Japan Earthquake in 2011 **Yasushi Ohkusa**
01:40 - 02:00 PM	Analysis of Zero-Inflated and Overdispersed Time Series: An Application to Syphilis Surveillance in the United States **Ming Yang**	Using a Syndromic Approach to Monitor Alcohol-Related Visits of College-Aged Emergency Department Patients **Alejandro Cajigal, MPH**	Confusing Standards: Common Misconceptions about Disease Surveillance Standards **Wayne Loschen, MS**	Predictors of vaccination uptake for the 2009 influenza pandemic (H1N1) in Montreal **Luc de Montigny, PhD**
02:00 - 02:20 PM	Optimal sequential management decisions for measles outbreaks **Jarad Niemi**	Automated chronic disease surveillance and visualization using electronic health record data **Michael Klompas**	S&I Public Health Reporting Initiative- Building the Future of Harmonized Biosurveillance Systems **Nikolay Lipskiy, MD, DrPH**	Use of the National Poison Data System after the 2011 Japan Radiological Incident for Surveillance of Incident-related Exposures in the United States **Royal Law, MPH**

Concurrent Session 2: Wednesday, December 07, 2011 02:40 PM - 04:00 PM			
	Geospatial Analysis	**Adverse Drug Events and Pharmacovigilance**	**Informatics Lessons Learned**	**Event Surveillance II**
02:40 - 03:00 PM	Comparing Methods for Sentinel Surveillance Site Placement **Geoffrey Fairchild**	Early Detection of Adverse Drug Events Using the Full Text of Letters to the Editor **Chao Yang**	A Demonstration of Meaningfully Using the ISDS Recommended Data Elements **Joseph Lombardo**	Defining emergency department asthma visits for public health surveillance **Debbie Travers, PhD**
03:00 - 03:20 PM	Clustering of U.S. Cities Based on Mortality from Influenza and Pneumonia **Eric Foster**	Adverse Drug Events: Insights From Google Search Volume **Jacob Simmering**	Use of an electronic health record system for public health surveillance **James Cheek, MD, MPH**	Monitoring winter-seasonal acute gastroenteritis emergency department visits by age **Don Olson**
03:20 - 03:40 PM	Changes in the Spatial Distribution of Syphilis **Sean Tolentino**	Utilizing the 'Crowd Trial' for Pharmacovigilance: A Case Report **Limor Bar - Hai, Msc**	Improving syndromic surveillance for non-power users: NC DETECT dashboards **Amy Ising**	Patient Management System Programmed Alert to Notify Providers of Suspected TB Cases **Shandy Dearth**
03:40 - 04:00 PM	Can we identify bellwether states with respect to syphilis incidence? **Mauricio Monsalve, MSc**	Leveraging the 'Wisdom of the Crowd' as a BioSurveillance tool. **Limor Bar - Hai, MSc**	Electronic Tracking of Influenza-like Illness Incidence in an Outpatient Population **Steve Di Lonardo, MSc**	Using a real time syndromic surveillance system to track heat related illnesses during a heat wave. **Shandy Dearth, MPH**

Concurrent Session 3: Wednesday, December 07, 2011 04:20 PM - 05:40 PM			
	Spatial Cluster Detection I	**System Improvement I**	**Natural Language Processing**	**Event Surveillance III**
04:20 - 04:40 PM	Fast Graph Structure Learning from Unlabeled Data for Outbreak Detection **Sriram Somanchi**	A systematic approach to building and sustaining a regional and local biosurveillance community of practice. **Bill Stephens**	A web-based platform to support text mining of clinical reports for public health surveillance **Annie Chen**	Inventory of syndromic surveillance systems in Europe by the Triple-S Project **Anne Fouillet**
04:40 - 05:00 PM	Detecting Previously Unseen Outbreaks with Novel Symptom Patterns **Daniel Neill, PhD**	Improvement of Epidemiology Business Processes through the Evolution of Biosurveillance **Taj Azarian, MPH**	Using cKASS to facilitate knowledge authoring and sharing for syndromic surveillance **Liqin Wang, Master**	Aiding the practice of tuberculosis control: a decision support model to predict transmission **Hiroshi Mamiya, M.Sc**
05:00 - 05:20 PM	Significant multiple high and low risk regions in event data maps **Luiz Duczmal, PhD**	Surveillance in New Jersey ? From Anthrax to Automation **Teresa Hamby, MSPH**	Evaluating Syndrome Definitions in the Extended Syndromic Surveillance Ontology **Mike Conway**	Crowdout: When do other events hinder informal disease surveillance? **David Scales, MD, PhD**
05:20 - 05:40 PM	Spatial Cluster Detection in Case-Control Datasets with the Autonomous Leaves Graph **Luiz Duczmal, PhD**	Ten Years After Amerithrax: Have Improvements to Our Bioterrorism and Influenza Surveillance Networks Enhanced Our Preparedness? **Alan Siniscalchi**	Disease Model Fitness and Threshold Creation for Surveillance of Infectious Diseases **Michael Waddell**	The Implementation of an Outbreak Management Solution in New York State **Hwa-Gan Chang, PhD**

第三天：12 月 8 日

本日的 Concurrent Session 中，在"Novel Data Stream/ Novel Methods"口述論文發表的單元共有 8 篇論文發表，本人亦於本單元中，報告 2009 年流感大流行時，本局與衛生署合作建立死亡診斷書資料同步交換機制，建置台灣肺炎及

流感死亡率即時監測及預警監測系統，肺炎及流感死亡率的趨勢，在流感流行季提供預警功能，並提供流感疫情研判的參考依據，資訊並定期發佈在本局網站上並即時回饋給民眾、醫療院所以及醫護人員。同單元其他報告主題包括：Charles Cairns 報告在美國如何利用緊急醫療服務資料 Emergency Medical Services (EMS) 建置全州生物監測的新方法；症狀監測的概念，不僅局限於傳染病監測，也常被運用在公共衛生的監測上，Marcus R.的報告，利用美國波士頓當地 9 間醫院 2007-2010 年的急診資料，進行騎自行車所造成的相關傷害之症狀監測分析，最常見的症狀是骨折脫臼，以 50-59 歲及 18-24 歲的年齡層最多，以頭部受傷為主，該研究亦是美國 CDC BioSense Program 的合作計畫之一，研究結果將常發生事故之熱點(Hot spots)及高危險族群等資料，提供美國 CDC 及州政府制定相關預防措施參考。

美國哈佛大學 Rumi Chunara 報告自 2010 年海地霍亂疫情發後，由該次流行的霍亂菌株的序列發現病源可能來自其他國家,在其他國家也陸續檢驗出該序列霍亂菌株的同時，該研究針對已被懷疑有霍亂疫情但尚未爆發大流行的 6 個國家，利用在疾病爆發 100 天內在 Tweeter 網站曾經利用 Tweets 功能，Tweets 是一個可以接受 140 字元長度文字功能，輸入文字後上傳可以與世界分享任何有趣的事物，並以英文、法文及西班牙文搜尋 Tweets 文字內容包含「霍亂」相關字眼的訊息，透過哈佛大學的 model 運算並檢定社交網絡的資料，用以推估第二波傳染病爆發流行的風險。

美國華盛頓州衛生單位傳染病流行病學部門 Dr. Natasha Close 報告，利用 health information exchange 的方式，監測實驗室確診的流感住院病人，

美國芝加哥大學 Dr. Dino Rumoro 報告有鑑於美國 CDC 對 influenza-like illness (ILI)之病例定義較寬鬆敏感度較低，本研究利用回溯性橫斷研究，分析在醫學中心急診室的 ILI 病人之臨床症狀發現，2009-2011 二年間 2661 位病人中 9.2%確診為流感陽性，分析其症狀 85%個案有發燒、89%個案有咳嗽及 23%個案有喉嚨痛（CDC 定義的三項症狀），其中達統計學上顯著意義的症狀有發燒、咳嗽和肌肉酸痛，CDC 定義的症狀「喉嚨痛」未顯著，CDC 未列的症狀「肌肉酸痛」顯著，年齡層以 5-24 歲 25-50 歲顯著，建議 ILI 之病例定義修正為 1.發燒伴隨咳嗽或肌肉酸痛或流鼻水 或 2.發燒伴隨咳嗽。

Thursday, December 8, 2011

Time	Event
7:00 AM	**Continental Breakfast**
	Affiliate Meeting
	Community of Innovators in Epidemiology and Public Health Informatics
8:00 AM	**Concurrent Session 4**
9:20 AM	*Break*
9:35 AM	**Concurrent Session 5**
10:55 AM	*Break*
11:10 AM	**Concurrent Session 6**
12:30 AM	Lunch
12:45 PM	ISDS Committee Meetings
	Conference Program Committee
	Education and Training Committee
	Global Outreach Committee
	Public Health Practice Committee
	Research Committee
1:30 PM	Lunch and Learn
	Alexander Garza, Department of Homeland Security
2:15 PM	**Round Table Discussions**
	NBAS Report (April 2011)
	Meaningful Use
	Evaluation
	Data Quality
	Interfaces: GIS, Visualizations, Dashboards, etc.
	Surveillance for chronic diseases, injury, etc. (non-infectious diseases)
3:00 PM	*Break*
3:15 PM	**Post-Disaster Surveillance Panel**
	Farah Husain, Centers for Disease Control and Prevention
	Kevin Clarke, Centers for Disease Control and Prevention
	David Fitter, Centers for Disease Control and Prevention
4:00-4:30 PM	**Closing and Awards**
	Daniel Neill, ISDS Scientific Program Committee Co-Chair
	Karl Soetebier, ISDS Scientific Program Committee Co-Chair

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Concurrent Session 4: Thursday, December 08, 2011 08:00 AM - 09:20 AM			
	Spatial Cluster Detection II	**One Health**	**Informatics and Infrastructure**	**Influenza-Like Illness Surveillance**
08:00 - 08:20 AM	Scalable Detection of Irregular Disease Clusters Using Soft Compactness Constraints **Skyler Speakman**	Regional Emergence of TB Lesions in Swine Identified at Slaughter **Wolf Weber**	An Evaluation of Electronic Laboratory Data Quality and a Health Information Exchange **Brian Dixon, MPA, PhD**	Adopting a common influenza-like illness syndrome across multiple health jurisdictions **Don Olson**
08:20 - 08:40 AM	Spatial cluster detection through constrained dynamic programming **Luiz Duczmal, PhD**	Application of Event-Based Biosurveillance to the 2011 E. coli Outbreak in Germany **Emily Iarocci, PhD Candidate**	Linking Informatics and Cross-Programmatic Public Health Strategic Objectives **Geraldine Johnson, MS**	Case Definition for Real-Time Surveillance of Influenza-like Illness **Dino Rumoro**
08:40 - 09:00 AM	Online surveillance of multivariate small area disease data: A Bayesian approach **Ana Corberan**	Digital Surveillance of the Illegal Wildlife Trade: Identifying Hot-spots for Emerging Zoonoses **Amy Sonricker, MPH**	Building Meaningful Use Reporting Infrastructure In NH Through Partnerships **David Swenson, M Ed**	Comparison of ED and Urgent Care ILI Surveillance Data From the 2009 H1N1 Outbreak **Robert Redwood, MD**
09:00 - 09:20 AM	Another Type of Cluster Monitoring: Detection of Groups of Anomalous Patient Residence Locations **Aaron Wendelboe, PhD**	Subsidized laboratory testing as an incentive for improved livestock disease reporting **Kathy Zurbrigg, MSc**	Tuning a Chief Complaint Text Parser for Use in DoD ESSENCE **Kenneth Cox, MD MPH**	The validity of emergency department influenza-like-illness (ILI) for laboratory-confirmed influenza in children **Carla Rodriguez, PhD**

Concurrent Session 5: Thursday, December 08, 2011 09:35 AM - 10:55 AM			
	Surveillance Systems	**Novel Data Stream**	**Surveillance Across Borders**	**Meaningful Use / Health Information Exchange**

	Surveillance Systems	Novel Data Stream	Surveillance Across Borders	Meaningful Use / Health Information Exchange
09:35 - 09:55 AM	*Hierarchical Filtering of ESSENCE for Routine, Distributed Disease Monitoring by the Veterans Health Administration* **Howard Burkom, PhD**	*Do geographic trends of social media indicate risk of secondary infectious disease outbreaks?* **Rumi Chunara, PhD**	*Enhancing Surveillance for Infectious Disease in the US-Mexico Border Region of Arizona* **Orion McCotter, MPH**	*Inpatient Data: A New Frontier in VA Biosurveillance and Public Health Monitoring from the Electronic Health Record* **Cynthia Lucero, MD CIC**
09:55 - 10:15 AM	*Towards a predictive model of the daily ED visits in Paris area from 2007 to 2010* **Anne Fouillet**	*Novel Approach to Statewide Biosurveillance Using Emergency Medical Services (EMS) Information* **Charles Cairns, M.D.**	*Gossamer Health: A meaningful, open-source approach to shared surveillance software* **Bill Lober**	*Surveillance of Laboratory-confirmed Influenza Hospitalizations Using a Health Information Exchange* **Natasha Close, MPH**
10:15 - 10:35 AM	*Multi-stream Influenza Surveillance for Situational Awareness* **Eric Lau**	*An Early Warning System for Pneumonia and Influenza Mortality in Taiwan* **Pei-Jung Chen, Master**	*Rapid ad-hoc cross-jurisdictional sharing of syndrome data using Distribute technology* **Ian Painter, Ph.D.**	*Surveillance of poison center data using the National Poison Data System web service* **Melissa Powell, MPH**
10:35 - 10:55 AM	*Finding Time-of-Arrival Clusters of Exposure-Related Visits to Emergency Departments in Contiguous Hospital Groups* **Lana Deyneka**	*Syndromic Surveillance for Bicycle Related Injuries in Boston, 2007-2010* **Marcus Rennick, MPH**	*Inferring Travel from Social Media* **Alessio Signorini, PhD Student**	*Unstructured Free-text Data and Meaningful Use* **Charles Ishikawa, MSPH**

Concurrent Session 6: Thursday, December 08, 2011 11:10 AM - 12:30 PM			

	Data Streams and Data Quality	Novel Methods	Resource Poor and International Settings	System Improvement II
11:10 - 11:30 AM	*Who Should We Be Listening to? Applying Models of User Authority to Detecting Emerging Topics on the EIN.* **Jason Fries, B.A. Computer Science**	*The EpiCanvas Infectious Disease Weather Map: An Interactive Visual Exploration of Temporal and Spatial Correlation* **Per Gesteland, MD, MS**	*Applications of Syndromic Surveillance in Resource Poor Settings: A Series of Case Studies* **Larissa May**	*Analysis of 5 years of multi-stream surveillance and weather data in Champaign County* **Ian Brooks, Ph.D.**
11:30 - 11:50 AM	*Utilization of EMR data for public health surveillance and situational awareness during the 2010 Haiti Earthquake; a preliminary assessment* **Dina Passman, MPH**	*Dengue Fever Outbreak Prediction* **Anna Buczak, Ph.D.**	*Mobile Technology Systems for Surveillance in Low Resource Settings* **Donna Medeiros**	*Evaluating the Relationship between Heat-Related ED Visits and Weather Variables.* **Bill Storm, MPH, BS**
11:50 - 12:10 PM	*National Health Insurance: a new application for non-specific surveillance in Reunion Island* **Pascal Vilain**	*A Zero-Inflated Poisson Based Spatial Scan Statistic* **Andre Cancado, Doctor**	*Establishment of Public-access Syndromic Surveillance System in Taipei City, Taiwan* **ChiaKun Chang, BA**	*An evaluation of mobile phone technology use for Integrated Disease Surveillance Project (IDSP) in Andhra Pradesh, India* **Vivek Singh, M.B.B.S., MPH**
12:10 - 12:30 PM	*How good is your data?* **Ian Painter, Ph.D.**	*Game-Theoretic Surveillance Approaches for Hospital-Associated Infections* **Aaron Miller, MA Economics**	*Applications of the ESSENCE Desktop Edition for Outbreak Detection in a Resource-Limited Setting* **John Mark Velasco, MD, MPH**	*Use of syndromic surveillance in decision making during the H1N1 pandemic in Ontario, Canada* **Rachel Savage, MSc**

100 年 12 月 9 日下午 7 點 45 分由美國亞特蘭大國際機場搭乘達美航空班機，於當地時間 12 月 9 日晚上 10 點 17 分抵達美國舊金山國際機場進行轉機，12 月 10 日凌晨 0 點 05 分由美國舊金山國際機場搭乘中華航空班機，於台灣時間 12 月 11 日早上 6 點 00 分抵達台灣桃園國際機場。

赴美國參加第十屆國際傳染病監測學會年會之會議行程表

日期	工作日誌	地點	行程內容
100/12/04	啟程	台北→美國亞特蘭大	路程
100/12/05	抵達	美國亞特蘭大	抵達
100/12/06～ 100/12/08	會議	美國亞特蘭大	開會
100/12/09	返程	美國亞特蘭大→台北	路程
100/12/10	轉機	美國亞特蘭大→台北	路程
100/12/11	抵達	台北	抵達

心 得 及 建 議

國際傳染病監測學會年會提供來自世界各國學者專家交換各國傳染病監測方法與研究結果之平台。議程包含專題論壇、口頭論文及壁報論文發表。

本人於此次大會中，除積極參加相關論壇與討論外，所發表之運用死亡通報資料建立台灣肺炎及流感死亡率即時監測及經驗，也獲得與會學員討論，顯示台灣在流感疫情監測上有關肺炎及流感死亡率即時監測的作為得到國際肯定。最後，由大會宣布明年（2012）的 ISDS 學會年會將在加州的聖地牙哥舉辦。

本報告建議如下：

1. 加強台灣傳染病監測系統之監測品質效益評估的研究，包含系統時效性、完整性、代表性、敏感度、特異度及可用性等指標，同時加強監測資料分析發法的研究以達到早期偵測的目的並提高預警能力。

2. 國際疫情瞬息萬變，持續建立與國外進行國際醫療衛生交流及國際合作之機制，認識各國使用症狀監測系統的概況，以有效達成建置系統監測之目的，並作為系統進一步整合之參考。

3. 持續追蹤肺炎及流感死亡率與流感疫情相關性研究之最新進展。