



National Institute of Allergy and Infectious Diseases

Leading research to understand, treat, and prevent infectious, immunologic, and allergic diseases.



Centers of Excellence for Influenza Research and Surveillance (CEIRS)

5th Annual CEIRS Meeting

April 18 - 20, 2011

Atlanta, Georgia

Marriott Evergreen Conference Resort
Stone Mountain, Georgia

Sponsored by
NIH/NIAID CEIRS Program

Hosted by
Emory-UGA Influenza Pathogenesis and
Immunology Research Center (IPIRC)

<http://web.mac.com/tcassin/iWeb/CEIRS2011/HOME.html>

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Welcome

**5th Annual National Institute of Allergy and Infectious Diseases
Centers of Excellence in Influenza Research and Surveillance Network
Meeting**

April 18-20, 2011
Emory University
Marriott Evergreen Conference Center at Stone Mountain Park

Dear Colleague,

Welcome to the 5th annual meeting of the Centers of Excellence in Influenza Research and Surveillance on behalf of the Influenza Program at the National Institutes of Health/National Institute of Allergy and Infectious Disease/Division of Microbiology and Infectious Disease (NIH/NIAID/DMID), and the Emory/UGA Influenza Pathogenesis and Immunology Research Center (IPIRC).

This meeting brings together representatives of the CEIRS network, including the foremost research scientists, public health experts, government representatives, wildlife biologists and veterinarians from all over the world to exchange and discuss critical scientific information on influenza virus infection in animals and in humans. The meeting will focus on progress made on the basic biology of influenza viruses, emerging scientific questions and future directions of the multiyear collaborative CEIRS contracts at the University of Rochester, Mount Sinai School of Medicine, St. Jude Children's Research Hospital, University of Minnesota and Emory University.

Influenza virus continues to evolve and emerge throughout the world and in many different animal reservoirs, and we will hear about progress and new discoveries in this area developed by the Centers, strengthening our understanding of this pathogen. Important advances continue to be made on influenza virology, transmission, immunology and pathogenesis. Together, the research in the CEIRS continues to highlight the impact of this virus on the world.

We anticipate an exciting meeting covering broad areas of the influenza field. There will be 44 speakers, dozens of posters, and plenty of opportunities to form collaborations, develop interactions and exchange ideas and information, in both formal sessions and informal get-togethers. We hope you enjoy this opportunity to visit Atlanta and share your research and opinions as part of this important partnership.

Sincerely,

Diane Post, PhD
Program Officer
NIAID/DMID

Robin Mason, MS, MBA
Clinical Trials Specialist
NIAID/DMID

Richard W. Compans, PhD
PI/Director
IPIRC



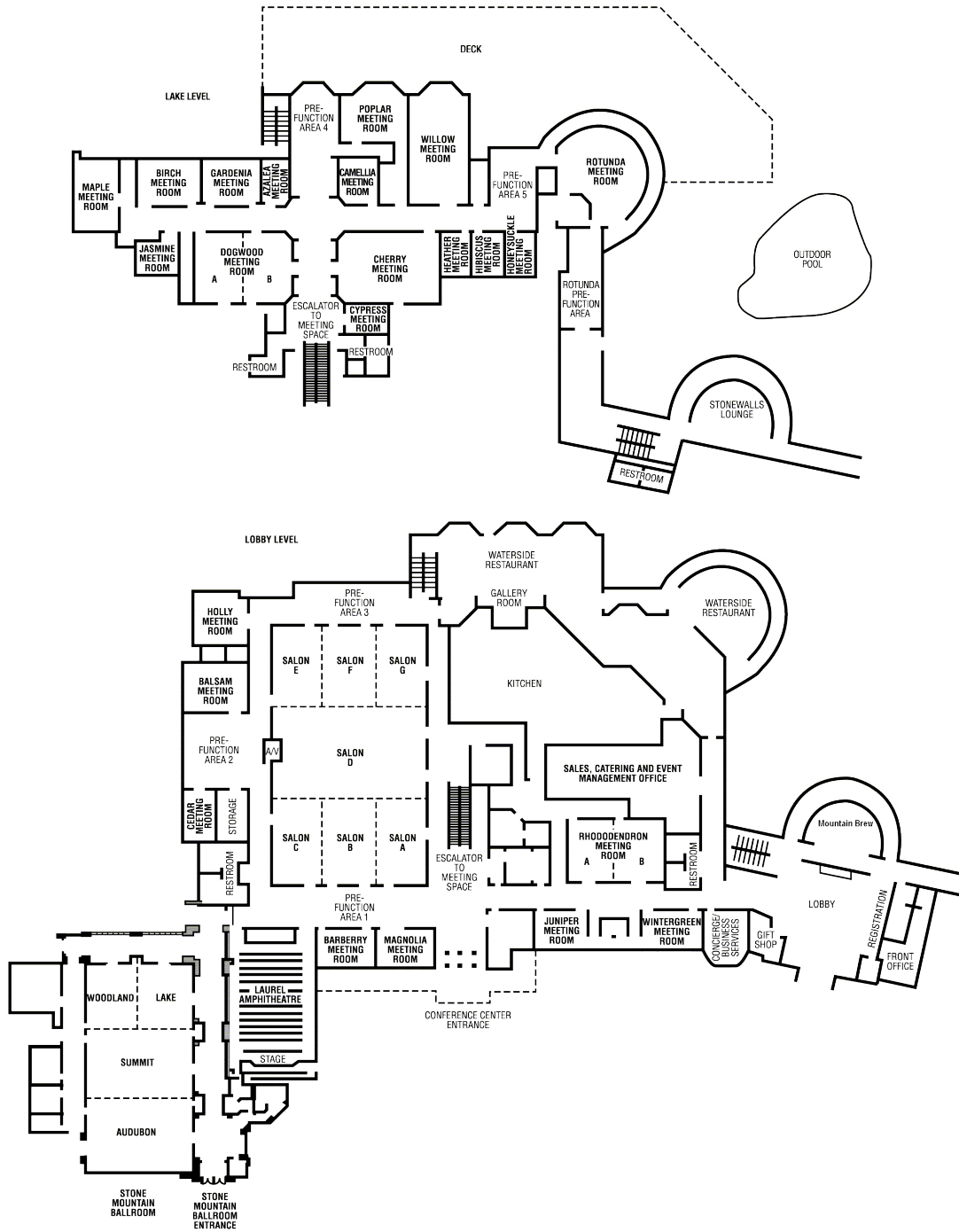
www.stonemountainpark.com

From Hartsfield-Jackson International Airport

When exiting the Airport, follow signs to I-285. When you get to I-285, take I-285 East (towards Augusta). Follow I-285 to exit 39-B, the U.S. Hwy 78 East (Snellville/Athens) exit. Travel 7.7 miles and take exit 8, the Stone Mountain Park Main Entrance. Follow the exit ramp to the East Gate entrance of Stone Mountain Park.



EVERGREEN FLOOR PLAN



Program Summary

5th Annual CEIRS Network Meeting, Emory University, Marriott Evergreen Conference Center

Sunday, April 17, 2011

5:00 – 7:00 pm Registration - Conference Registration Desk

7:00 – 9:00 Welcome Reception - Resort Deck

Monday, April 18, 2011

7:30-8:30 Registration - Conference Registration Desk
Breakfast - Meeting Foyer

8:30-8:35 Welcome

8:35 – 8:50 Update on CEIRS and NIAID Influenza Portfolio

8:50 – 10:20 **Session 1 Virology** – Stone Mountain Ballroom

10:20 – 10:45 Break - Meet the Contract Staff - Rhododendron Room

10:45 – 12:00 Session 1, Virology – continued

12:00 – 1:00 Lunch – Waterside Restaurant
Program Coordinators Lunch

1:00 – 1:40 Session 1, Virology - continued

1:40 – 2:10 Break - Meeting Foyer

2:10 – 3:30 **Session 2 - Transmission** - Stone Mountain Ballroom

3:30 – 4:30 Panel Discussion 1
"Achieving broad-spectrum protective immunity"

4:30 – 5:30 Poster Viewing

5:30 – 9:30 Dinner at Georgia Aquarium

Tuesday, April 19, 2011

7:30-8:15 Breakfast - Meeting Foyer

8:15-8:20 Welcome and housekeeping

8:20 – 8:45 Michael Osterholm (MCEIRS)

8:45 – 10:15 **Session 3 – Surveillance** - Stone Mountain Ballroom

10:15 – 10:45 Break - Meeting Foyer

10:45 - 11:15	Session 3 – Surveillance continued
11:15 – 12:30	Panel Discussion 2 “Can We Predict the Next Pandemic?”
12:30 – 1:30	Lunch – Waterside Restaurant Network Executive Committee Meeting
1:30 – 3:00	Session 4 – Immunology and Pathogenesis – Part 1
3:00 – 3:30	Break - Meeting Foyer
3:30 – 4:25	Session 4 – Immunology and Pathogenesis – Part 1 continued
4:30 – 6:30	Poster Session (poster tours)
6:30	Dinner - Memorial Hall in Park

Wednesday, April 20, 2011

7:30-8:30	Breakfast - Meeting Foyer
8:40-8:45	Welcome and housekeeping
8:45 – 10:00	Session 5 - Immunology and Pathogenesis – Part 2
10:00 – 10:30	Break - Meeting Foyer
10:30 – 10:55	Session 5 Immunology and Pathogenesis – Part 2 continued
Adjourn	
12:00 – 1:00	Lunch – Waterside Restaurant
1:00 - 6:00	Data Managers Meeting
1:00 – 5:00	Breakout A – Surveillance
1:00 – 5:00	Breakout B – Strengthening the CEIRS network
1:00 – 5:00	Breakout C - Conducting NIAID clinical studies

Departures

Chartered buses (pre-paid) to Atlanta airport at 12:30, 1:15, 6:15 pm

5th Annual CEIRS Network Meeting

April 18-20, 2011

Marriott Evergreen Conference Resort

Stone Mountain Park

4021 Lakeview Drive, Stone Mountain, GA 30083

Arrival

Sunday April 17, 2011

5:00 – 7:00 pm Registration – Conference Registration Desk

7:00 – 9:00 Welcome Reception – Resort Deck

Monday April 18, 2011

7:30-8:30 Registration – Conference Registration Desk

Breakfast – Meeting Foyer

8:30-8:35 Welcome - Richard W. Compans, IPIRC Director

8:35 – 8:50 Update on CEIRS and NIAID Influenza Portfolio (D. Post & Irene Glowinski)

Session #1 – Virology - Stone Mountain Ballroom

Session Chairs: Stacey Schultz-Cherry, John Steel

8:50 – 9:15 Richard Cummings (IPIRC) Arrays of naturally occurring glycans as HA receptors

9:15 – 9:40 Charles Russell (SJCEIRS) A structural basis for the adaptation and control of emerging influenza viruses: the HA protein

9:40 – 9:55 Rafael Medina (CRIP) Effects of glycosylations in the globular head of the 2009 H1N1 influenza virus hemagglutinin: modulation of virulence and antigenicity

9:55 – 10:20 Susan Daniel (NYICE) Fast kinetics of influenza virus fusion revealed using rapid proton uncaging

10:20 – 10:45 Break – Meet the Contract Staff – Rhododendron Room

10:45 – 11:00 Lindomar Pena (CRIP) Complete protection against highly pathogenic H5N1 after immunization with an H9N2 influenza vector expressing the H5 hemagglutinin from segment 8

11:00 – 11:15 Dan Dlugolenski (IPIRC) Assessing requirements for influenza reassortment in human and swine cells

11:15 – 11:40 Camille Lebarbenchon (MCIERS) Host shifts and molecular evolution of H7 avian influenza virus hemagglutinin

11:40 – 11:55 Victoria Meliopoulos (IPIRC) Identifying human protease genes required for influenza replication

- 12:00 – 1:00 **Lunch – Waterside Restaurant**
Coordinators Lunch - Rhododendron Room (ask hostess for to-go container and bring your lunch)
- 1:00 – 1:15 Susu Duan (SJCEIRS) A novel neuraminidase inhibitor resistance genotyping method in influenza A viruses by single nucleotide polymorphism analysis
- 1:15 – 1:40 Ralph Tripp (IPIRC) siGENOME discovery and validation of novel anti-influenza therapeutic drugs
- 1:40 – 2:10 **Break – Meeting Foyer**

Session #2 – Transmission

Session Chairs: Richard Webby, Anice Lowen

- 2:10 – 2:35 Hui Ling Yen (SJCEIRS) Gene constellation determines the transmissibility of the 2009 pandemic H1N1 influenza viruses in a ferret model
- 2:35 – 2:50 Nicole Bouvier (CRIP) Transmission of oseltamivir-sensitive and -resistant seasonal influenza A/H1N1 viruses in the guinea pig model
- 2:50 – 3:15 Huachen Zhu (Maria) (SJCEIRS) Reassortants of the pandemic H1N1/2009 virus in swine and their potential to infect human
- 3:15 – 3:30 Brian Kimble (CRIP) Compatibility of H9N2 and 2009 pandemic H1N1 for transmission in the ferret model

Panel Discussion #1

- 3:30 – 4:30 "Achieving broad-spectrum protective immunity"
 Convener: Richard W. Compans
 Panelists: (10 min each)
 Peter Palese: "HA stalk-based vaccines"
 Richard Compans: "M2-based vaccines"
 Rafi Ahmed: "Passive immunization"
- General Discussion
- 4:30 – 5:30 Poster Viewing (Poster Tours will be Tuesday)
- 5:30 – 5:45 Board bus to Georgia Aquarium
5:45 Departure of bus to Georgia Aquarium
- 6:30 – 7:30 Free time to explore Georgia Aquarium
 7:30 – 9:30 Dinner at Georgia Aquarium by Wolfgang Puck

Tuesday April 19, 2011

7:30-8:15 **Breakfast – Meeting Foyer**

8:15-8:20 Welcome and housekeeping

Perspective

8:20 – 8:45 Michael Osterholm (MCEIRS) Looking at the H1N1 pandemic in the rear view mirror

Session #3 – Surveillance

Session Chairs: Ron Fouchier, Marie Gramer

8:45 – 9:00 Angela Maxted (MCEIRS) Avian influenza virus infection dynamics in shorebird hosts

9:00 – 9:15 Jonathan Runstadler (CRIP) Perspectives on avian influenza disease ecology and evolution from the Alaskan subarctic

9:15 – 9:30 Sofya Sayfutdinova (CRIP) Surveillance for Avian Influenza viruses in wild migratory birds on the Asian part of Russia in 2008-2010

9:30 – 9:45 Ana S. Gonzalez Reiche (CRIP) Avian influenza surveillance in Guatemala

9:45 – 10:00 Martin Gilbert (MCEIRS) The ecology of wild type and highly pathogenic avian influenza viruses in wild birds in Mongolia

10:00 – 10:15 Peninah Munyua (MCEIRS) Prevalence of influenza viruses in animals and humans within the Kibera informal settlement in Nairobi, Kenya

10:15 – 10:45 **Break – Meeting Foyer**

10:45 - 11:00 Emmanuel Couacy-Hymann (SJCEIRS) Active animal influenza surveillance in Western Africa

11:00 – 11:15 Srinand Sreevatsan (MCEIRS) Unraveling hidden diversity among avian influenza A viruses in primary samples using next generation sequencing

Panel Discussion #2

11:15 – 12:30 “Can We Predict the Next Pandemic?”

Convener: Michael Osterholm

Panelists: (10 min each)

Richard Scheuermann: "The informatics crystal ball: mining the past to predict the future"

Robert Webster: The role of surveillance

Nancy Cox: TBA

John Treanor: What do we do if we can't predict the next pandemic?

General Discussion

12:30 – 1:30 Lunch – Waterside Restaurant
Network Executive Committee Meeting - Rhododendron Room (ask
hostess for to-go container and bring your lunch)

Session #4 – Immunology and Pathogenesis – Part 1

Session Chairs: Carol Cardona, Jason Weaver

1:30 – 1:55	Yoshi Kawaoka (CRIP) Pandemic influenza
1:55- 2:10	Mirco Schmolke (CRIP) Differential contribution of PB1-F2 to the virulence of highly pathogenic H5N1 avian influenza A viruses in mammalian and avian species
2:10 – 2:35	Stacey Schultz-Cherry (SJCEIRS) Pathogenesis of an H5-H1 reassortant virus
2:35 – 3:00	Andrea Sant (NYICE) Establishing and remodeling of CD4 T cell memory to influenza
3:00 – 3:30	Break – Meeting Foyer
3:30 – 3:45	Troy Cline (SJCEIRS) Transforming growth factor- β : activation by neuraminidase and role in influenza virus pathogenesis
3:45 – 4:10	Mark Tompkins (IPIRC) Therapeutic antibody strategies for influenza virus
4:10 – 4:25	Irene Ramos Lopez (CRIP) Humoral and cell-mediated immune response to monovalent 2009 influenza A/H1N1 vaccine in healthy and high risk children
4:30 – 6:30	Poster Session (poster tours)
6:30	Board buses to Memorial Hall (First group)
6:50	Board buses to Memorial Hall (Second group)
7:00	Dinner (Memorial Hall in Park) Jazz band and fireworks

Day 3 – Wednesday April 20, 2011

7:30-8:30 **Breakfast – Meeting Foyer**

8:40-8:45 Welcome and housekeeping

Session #5 Immunology and Pathogenesis – Part 2

Session Chairs: David Topham, Ana Fernandez Sesma

8:45 – 9:10 Christine Oshansky-Weilnau (SJCEIRS) Acute immune responses to influenza in humans

9:10 – 9:35 Hulin Wu (NYICE) Bioinformatics and systems biology approaches for influenza vaccine research

9:35 – 10:00 Joshy Jacob (IPIRC) Persistence of influenza virus-specific IgM antibodies

10:00 – 10:30 Break – Meeting Foyer

10:30 – 10:55 Bali Pulendran (IPIRC) Programming the magnitude and persistence of antibody responses with innate immunity

10:55 – 11:10 Eun Lee (NYICE) A novel method for diagnosis of acute influenza viral infection using newly generated antibodies from circulating antibody secreting cells

11:10 – 11:25 Sander Herfst (CRIP) Multidrug-resistant pandemic A/H1N1 influenza virus with I223R in the neuraminidase is not attenuated in its replication capacity, pathogenesis or transmissibility in the ferret model

11:25 – 11:50 Jens Wrarmert (IPIRC) Human B cell response to pandemic H1N1

11:50 – 12:00: Adolfo Garcia-Sastre, New inter-collaborative CEIRS training opportunities

Adjourn

12:00 – 1:00 Lunch – Waterside Restaurant

Data Management and Break-outs

1:00 – 6:00 Data Managers Meeting (Michael Saylor, chair) Rhododendron Room

1:00 - 5:00 Breakout A – Surveillance (David E Stallknecht, chair) Cherry Room

1:00 – 5:00 Breakout B – Strengthening the CEIRS network, a follow-up from CEIRS retreat (Diane Post, chair) Dogwood Room

1:00 – 5:00 Breakout C - Conducting NIAID clinical studies (Robin Mason, chair) Salon C

During break-outs, beverages and snacks will be available in the break areas.

Departures

Chartered buses (pre-paid) to Atlanta airport @ 12:30, 1:15, 6:15. Use sign-sheet at registration.

5TH ANNUAL CEIRS MEETING POSTERS

Monday, April 18, 4:30 – 5:30: Traditional Poster Session
Tuesday, April 19, 4:30 – 6:30: Moderated Poster Tour (see end of list for specific times)

#	NAME	INSTITUTION	TITLE
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IMMUNOLOGY & PATHOGENESIS

01	Azadniv, M.	NYICE	Novel conserved and non-conserved HLA-A*0201 and -A*0301 restricted CD8 ⁺ T cells epitopes in 2009 pandemic H1N1 influenza virus discovered through use of HLA conditional ligands
02	Chavez, F.	NYICE	Utility and limitations in the use of publicly accessible algorithms for prediction of CD4 T-Cell epitopes I/P
03	Guo, H.	NYICE	Generation of novel CD8 T cell repertoires after 2009 pandemic influenza infection
04	Manuse, M.	IPIRC	Differential induction of innate responses in primary human and swine bronchial epithelial cells upon infection with Influenza A viruses
05	Oshansky, C.	SJCEIRS	Elucidating early site-of-infection immune responses to influenza A in young children
06	Sangster, M.	NYICE	Modulation of the influenza-specific B cell response by host and viral Factors
07	Scheible, K.	NYICE	Human CD8 T cell responses to 2009 pandemic and seasonal influenza
08	Weaver, J.	NYICE	Cytokine expression pattern differences between conserved versus non-conserved influenza pandemic H1N1-specific CD4 T cells
09	Chockalingham, A	CRIP	Deletions in the neuraminidase stalk region of H2N2 and H9N2 influenza subtypes do not affect post-influenza secondary bacterial pneumonia
10	Hamilton, B.	NYICE	Understanding the determinants of lethal synergism between S. aureus and influenza virus
11	Karlsson, E.	SJCEIRS	Fat flu: influence of the obese host on influenza viral evolution
12	Manicassamy, R.	CRIP	Analysis of <i>in vivo</i> dynamics of influenza virus–host interactions using fluorescent reporter viruses
13	Ozawa, M.	CRIP	Impact of amino acid mutations in PB2, PB1-F2, and NS1 on the replication and pathogenicity of pandemic (H1N1) 2009 influenza viruses
14	Sorrell, E.	CRIP	Ocular tropism of H7 influenza A viruses in vitro and ex vivo, determining the best animal model
15	Sutton, T.	CRIP	Development and applications of green fluorescent protein and luciferase-expressing strains of mouse-adapted pandemic H1N1

16	Varga, Z.	CRIP	The influenza virus protein PB1-F2 inhibits the induction of type I interferon by affecting MAVS function
17	Zaraket, H.	SJCEIRS	Acid stability of the HA protein determines H5N1 pathogenicity in chickens
18	Albrecht, R.	CRIP	Assessment of live attenuated influenza virus expressing modified NS1 as vaccines candidates in the ferret model.
19	Cai, Y.	CRIP	Improved hatchability and efficient protection after in ovo vaccination with live-attenuated H7N2 and H9N2 avian influenza viruses
20	Chiu, C.	IPIRC	Humoral immune responses to seasonal influenza vaccine in patients treated with tumor necrosis factor inhibitors
21	Detmer, S.	MCEIRS	Vaccine failure? Analyses of influenza A vaccine and outbreak viruses in swine
22	Gabbard, J.	IPIRC	Protection from pH1N1 challenge post single dose vaccination with recombinant adenovirus and cold-adapted influenza virus vaccines
23	Kasturi, S.	IPIRC	Programming the persistence and quality of antibody responses with innate immunity
24	Koutsonanos, D.	IPIRC	Improved long-term protective immune responses after skin delivery of influenza vaccine
25	Li, G.	IPIRC	Human B cell responses induced by pandemic H1N1 vaccination
26	Martin, M.	IPIRC	Cellular mechanisms of microneedle patches immunization
27	McCausland, M.	IPIRC	Comparative study of bone marrow plasma cells and blood borne plasmablasts following influenza vaccination in humans
28	Mooney, A.	IPIRC	Protection against H5N1 virus challenge by immunization with recombinant PIV5 encoding the H5 hemagglutinin gene
29	Ramos, I.	CRIP	Effects of receptor binding specificity of avian influenza virus on the human innate immune response
30	Santiago, F.	NYICE	Comparison of the antigenicity and immunogenicity of recombinant hemagglutinin proteins produced in various expression systems
31	Pena, L.	CRIP	Role of PB1-F2 in the replication and virulence of pandemic H1N1 and triple reassortant H3N2 influenza viruses in swine

SURVEILLANCE

32	Amonsin, A.	MCEIRS	Surveillance of swine for influenza A during 2010-2011 in Thailand
33	Amonsin, A.	MCEIRS	Serological survey for influenza A virus antibodies in free-grazing ducks, Nakhon Sawan province, Thailand
34	Bahl, J.	SJCEIRS	Structured meta-population dynamics of human influenza A H3N2 virus

35	Bahl, J.	SJCEIRS	Ecological and evolutionary dynamics of influenza A virus in wild bird populations
36	Boonpapong, N.	MCEIRS	Exploring associations with climate and the occurrence of influenza virus infection in Thailand
37	Boonpapong, N.	MCEIRS	Epidemiological surveillance of human pandemic influenza A during 2009 – 2010, Thailand
38	Bortz, E.	CRIP	Integrating surveillance, viral isolate characterization, and sequence data to advance understanding of the ecology of influenza A viruses
39	Fries, A.C.	MCEIRS	Use of trace element profiles in feathers to establish resident status of mallards (<i>Anas platyrhynchos</i>) in an influenza A virus surveillance study
40	Lewis, N.	CRIP	The ecology and evolution of avian influenza A viruses in wild birds in Georgia
41	Hill, N.	CRIP	Use of stable isotopes to identify resident and migrant mallards (<i>Anas platyrhynchos</i>) and their role in the circulation of avian influenza virus in California
42	Holden-Wiltse, J.	NYICE	Flu surveillance during the H1N1 pandemic
43	Huettmann, F.	CRIP	Climate gradients in the occurrence of avian influenza (AI): A landscape-scale assessment and its implications for global AI monitoring and detection
44	Imai, K.	CRIP	Characterization of the H5N1 virus isolated from a whooper swan with neurological signs in Hokkaido, Japan
45	King, C.-C.	IPIRC	Patterns and possible sources of avian influenza viruses through virological and serological surveillance in Taiwan, 2008-2010
46	Yuk, Lam T.	SJCEIRS	The evolutionary history and dynamics of swine influenza virus
47	Gordy, J.	IPIRC	Surveillance of feral cats for influenza a infection
48	Pickens, J.	IPIRC	Evaluation of a North American avian influenza A reservoir with pandemic potential
49	Poovorawan, Y.	MCEIRS	Characterization and phylogenetic analysis of human pandemic influenza A virus H1N1 in Thailand
50	Sonnberg, S.	SJCEIRS	Different subclades of HPAI H5N1 in healthy domestic ducks in Lao PDR
51	Torremorrell, M.	MCEIRS	Surveillance of influenza A virus using oral fluids in populations of vaccinated and non-vaccinated pigs
52	Verhagen, J.	CRIP	Linking low pathogenic avian influenza (LPAI) viruses in wild birds with outbreaks in poultry

TRANSMISSION

53	Allerson, M.	MCEIRS	The impact of maternally derived antibodies on the transmission of influenza virus in neonatal pig populations
54	Chou, Y.-Y.	CRIP	The effect of vitamin D on influenza virus transmission: A negative result
55	Dhanasekaran, V.	SJCEIRS	Evolutionary insights into the mammalian adaptation of influenza A viruses
56	Linster, M.	CRIP	The impact of silent nucleotide changes in the influenza A virus genome on virus replication in ducks
57	Msoffe, P.	MCEIRS	Unintended sustained contact between poultry and people in Tanzania: Implications in influenza research
58	Ridenour, C.	IPIRC	Transmission efficiency of low pathogenic influenza virus in ducks is influenced by route of inoculation, virus titer, and virus origin
59	Seibert, C.	CRIP	Characterization of broadly cross-reactive anti-hemagglutinin monoclonal antibodies in the guinea pig transmission model
60	Torremorell, M.	MCEIRS	Transmission parameters for a swine triple reassortant H1N1 influenza A virus in naïve, convalescent and vaccinated populations of pigs

VIROLOGY

61	Aggarwal, S.	NYICE	Biochemical analysis of influenza virus PB2 E627K mutation using baculovirus-expressed polymerase complex
62	Andersen, L.	IPIRC	Evaluating the human kinome to identify kinase factors required for influenza replication
63	Boonpapong, N.	MCEIRS	erythrocyte binding efficiency of human pandemic influenza A virus (H1N1)
64	Burnham, A.	SJCEIRS	p53 knockout mice infected with influenza: higher titers but better survival
65	Driskell, J.	IPIRC	One-step assay for detecting influenza using dynamic light scattering and gold nanoparticles
66	Ducatez, M.	SJCEIRS	Multiple reassortment events between endemic and pandemic A/H1N1 (2009) influenza viruses in swine in the United States
67	Fan, S.	CRIP	Characterization of avian H5N1 influenza viruses isolated from poultry in Vietnam
68	Fox, J.	IPIRC	Evaluating the role of indoleamine 2,3- dioxygenase during influenza infections
69	Rimondi, A.	CRIP	Evidence of reassortment of pandemic H1N1 influenza virus in swine in Argentina: are we facing the expansion of potential epicenters of influenza emergence?
70	Takimoto, T.	NYICE	Multiple mutations in PA are involved in mammalian adaptation and

pathogenicity of the 2009 pH1N1

71	Bradley, K.	IPIRC	Characterization of influenza HA pseudorevertants arising from passage of a receptor binding deficient mutant
72	Galloway, S.	IPIRC	Cleavage-activation and membrane fusion properties of influenza A virus HA subtypes
73	Hale, B.	CRIP	Quaternary dynamics contribute to influenza A virus NS1 protein multifunctionality
74	Ma, W.	SJCEIRS	PB2 residues 271, 590 and 591 are critical for viral replication and virulence of swine influenza virus <i>in vitro</i> and <i>in vivo</i>
75	Mattiaccio, J.	NYICE	Comprehensive proteomic analysis of influenza virus polymerase complex reveals a novel association with mitochondrial proteins and rna polymerase accessory factors
76	Noble, E.	NYICE	Biophysical analysis of influenza a virus RNA promoter at physiological temperatures
77	Rajsbaum, R.	CRIP	Species-specific inhibition of TRIM25 dependent RIG-I ubiquitination by the Influenza A virus NS1 protein
78	Yang, C.	IPIRC	A point mutation of a conserved residue in the HA of Qinghai H5N1 HPAIV renders it trypsin-dependent for cell fusion activity
79	Wan, H.	Ms. State	Genomic dynamics of influenza A viruses along Mississippi migratory bird flyway

POSTER TOUR	Moderator	Poster No.	Group
4:30 – 5:00	H. Guo J. Bahl	#1-8 #32 – 42	Immunology/Pathogenesis 1 Surveillance 1
5:00 – 5:30	H. Zaraket J. Verhagen	#9-17 #43 – 52	Immunology/Pathogenesis 2 Surveillance 2
5:30 – 6:00	Martin, M. A. Burnham	#18-31 #61 – 70	Immunology/Pathogenesis 3 Virology 1
6:00 – 6:30	P. Msoffe S. Galloway	#53-60 #71-78	Transmission Virology 2

Data Management Breakout Session

April 20th, 2011

1:00 – 1:15 pm (Michael Saylor)	Presentation from NIAID Overview of CEIRS Data Management
1:20 – 1:50 pm (Richard Scheuermann)	Presentation from IRD General overview of the 2010-2011 IRD accomplishments IRD's current vision of the future and expected challenges
1:55 – 2:20 pm (Jeanne Holden-Wiltse)	Presentation from Rochester Experiences with human surveillance submissions Experiences with the ImmPort submissions process Data management organizational structure
2:25 – 2:50 pm (Andi Plotsky, Shirin Jabbarzadeh)	Presentation from Emory Experiences with serology submissions Experiences with the ImmPort submissions process
2:50 – 3:10 pm	Break
3:10 – 3:50 pm (Eric Bortz, Florian Aldehoff)	Presentation from Mt Sinai Improving surveillance data and analysis Improving data standards Technical topics within data management
3:55 – 4:05 pm (Sanjeev Kumar)	IRD Data Management Discussion
4:10 – 4:20 pm (Alain Duchene)	MCEIRS Data Management Discussion
4:25 – 4:45 pm	Break
4:45 – 4:55 pm (Jerry Parker)	St Jude Data Management Discussion
5:00 – 6:00 pm	Review of key data management topics

NIAID CEIRS

Centers of Excellence for Influenza Research and Surveillance

CEIRS Annual Meeting Breakout Session: Strengthening the CEIRS Network, a follow-up from CEIRS retreat

Date: 04/20/2011; 1:00-5:00 pm

Location: Breakout B, Dogwood Room, Marriott Evergreen Conference Center

Overall goal of meeting:

This break-out session is focused on improving the scientific outcomes of the CEIRS Network through enhanced communication and collaboration between the centers. Topics for discussion include:

1. CEIRS Network “wow” factor
 - Overall goals and vision for the CEIRS Network – what do you want to be all about:
 - Training = influenza infrastructure
 - Detect emerging pathogens
 - International capacity building
 - Filling scientific “gap” areas – blue ribbon panel; new gaps
 - Interdisciplinary research; “One Health” bringing new people to the influenza field
 - Plan for mapping successes of network – what will be the CEIRS network story?
 - Data standardization and sharing – shift in culture
 - Pandemic research response – formal review
 - Joint data analysis
 - Making people aware of CEIRS – branding of CEIRS, CEIRS website, how can YOU promote CEIRS to the scientific community & public?
2. Identifying the viruses with pandemic potential
 - Currently centers are evaluating viruses for pandemic potential in individual laboratories. Should this activity be done as a network?
 - How do we move forward?
3. Strengthening surveillance ties to basic research
 - What is needed to better integrate the two research areas?
 - What information is needed to share between the groups?
4. Help investigators and facilitate interactions
 - General scientific meeting informal meetings: Richard/Adolfo
 - May 23-28 Keystone Symposium – Pathogenesis of Influenza
 - July 16-20 ASV
 - September 11-14, 4th ESWI Influenza conference
 - Promotion of SharePoint/other social media
 - Junior investigator CEIRS talks
 - Focused group meetings: this year surveillance & immunology; what is next?
 - Call for intercenter projects? How important to you/the network?
 - Lecture series – frequency? Is it working?

2011 CEIRS Annual Network Meeting – Participants

Participant	Affiliation	Email
A		
Evangeline Agbogu	Emory University	eagbogu@emory.edu
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