



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 & Surveillance (CEIRS)

National Institute of Allergy and Infectious Diseases
4th Annual CEIRS Network Meeting

August 3-5, 2010

UNIVERSITY OF ROCHESTER

Woodcliff Hotel and Spa
199 Woodcliff Drive, Fairport, New York

Web link: <http://www.niaid.nih.gov/labsandresources/resources/ceirs/>



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Welcome!

4th Annual National Institute of Allergy and Infectious Diseases Centers of Excellence in Influenza Research and Surveillance Network Meeting

August 3-5, 2010

University of Rochester Medical Center at
The Woodcliff Hotel and Conference Center

Dear Colleague,

Welcome to the 4th 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 Medicine and Infectious Disease (NIH/NIAID/DMID), and the University of Rochester Medical Center's New York Influenza Center of Excellence (URMC NYICE).

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. This 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 Emory University, Mount Sinai School of Medicine, St. Jude Children's Research Hospital, the University of Minnesota and the University of Rochester.

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. This meeting has significance in that it is the first full meeting of the CEIRS network to come after the 2009 H1N1 influenza pandemic. It has been an exciting, challenging, and productive year and we look forward to the opportunity to share all that we have learned from the experience of living through and researching the first influenza pandemic of the 21st century. Together the research in the CEIRS continues to highlight the impact of this virus on the world.

We anticipate an exciting meeting covering a vast swath of the influenza field. There will be over 30 speakers, dozens of posters, and plenty of opportunities to exchange ideas and information, form collaborations, and develop relationships in both formal sessions and informal get-togethers. We hope you enjoy this opportunity to visit Rochester and share your data and opinions by being part of this powerful coalition.

Sincerely,

Diane Post, PhD
Program Officer
NIAID/DMID

Robin Mason, PhD
Clinical Trials Specialist
NIAID/DMID

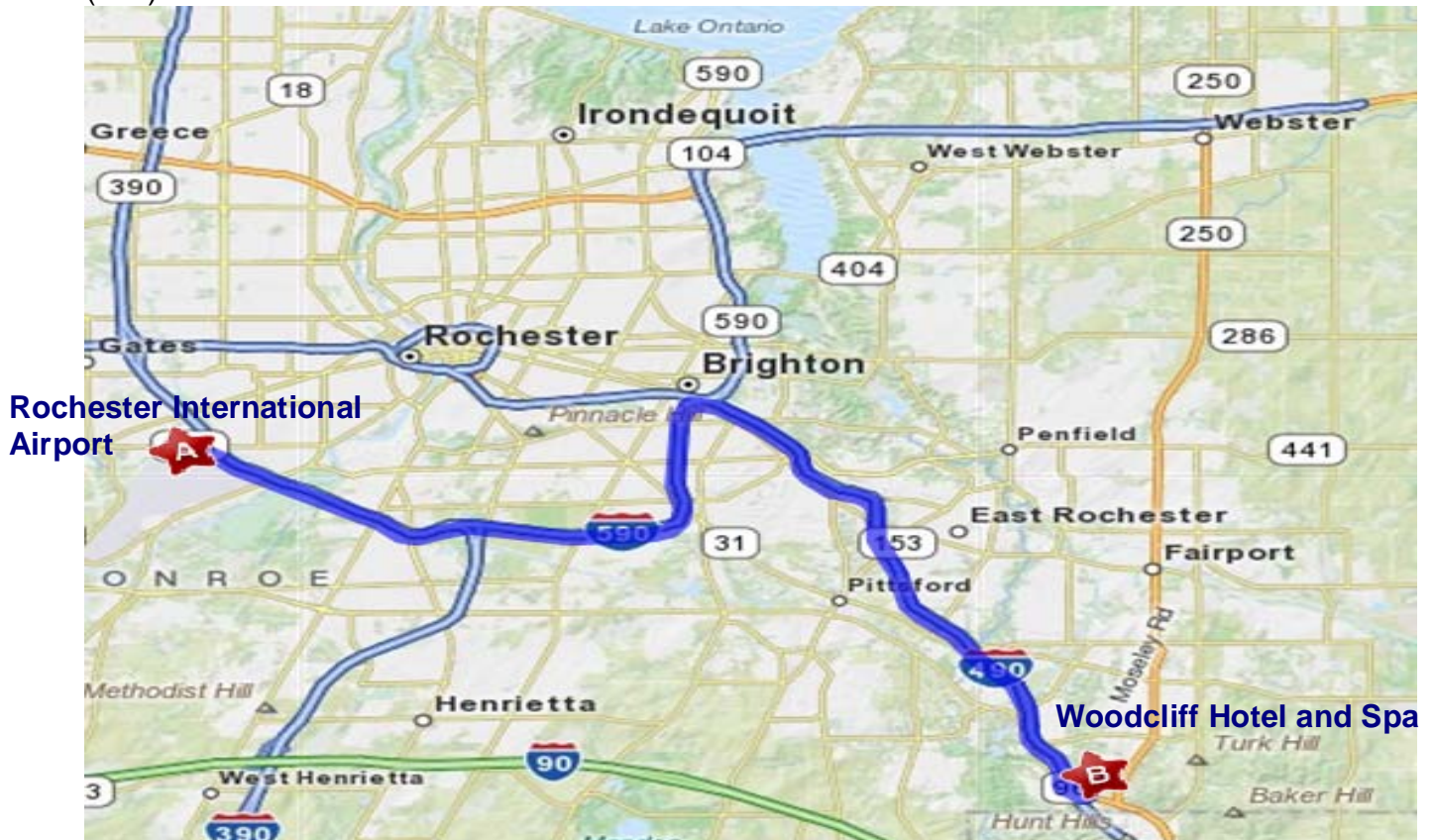
John Treanor, MD
PI/Director, NYICE
URMC

David Topham, PhD
Co-Director, NYICE
URMC

DIRECTIONS

Woodcliff Hotel and Spa

199 Woodcliff Drive
Fairport, NY 14450
(585) 248-4370



From Airport

When exiting the airport, turn right onto Brooks Avenue.
Bear right onto Rte. 390 South.
Continue on Rte. 390 South to Rte 590 North.
Follow Rte. 590 North to Rte 490 East.
Continue on 490 East to Exit 28 (Rte. 96 Mall Exit).
At the exit ramp light turn left onto Rte. 96.
Pass under the expressway and turn left at first traffic light onto Woodcliff Drive. At the top of the hill turn left at hotel sign.

From NYS Thruway

Take Exit 45 (Rochester 490 Exit). Go through tollbooths.
Stay to the right of the road and follow signs to Rte. 96 North.
Turn right on Rte. 96 North.
Woodcliff Drive is the 7th traffic light. (Pass Eastview Mall on left).
Turn right onto Woodcliff Drive.

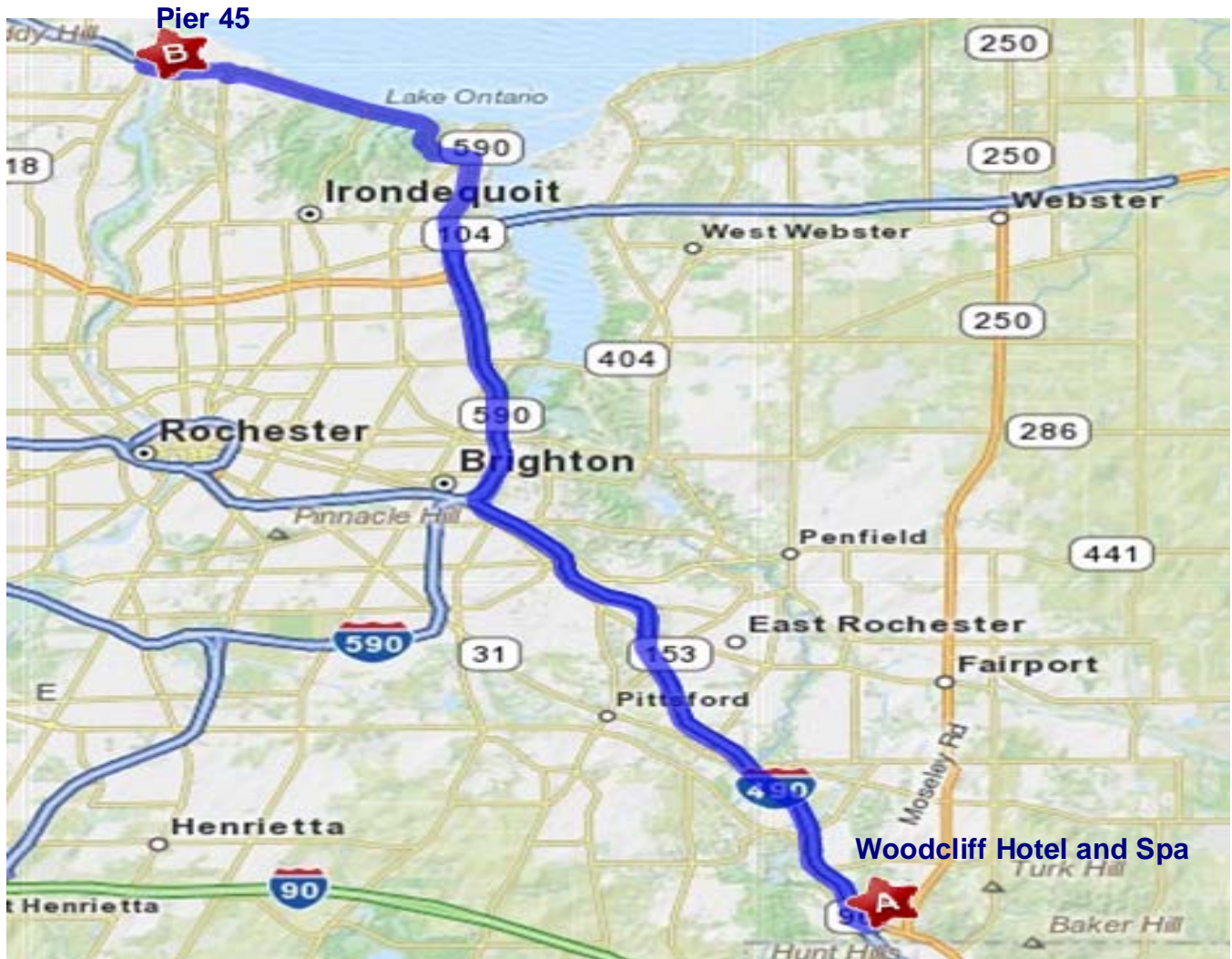
From Rochester

Take 490 East to Exit 28 (Mall Exit).
At the light turn left onto Rte. 96.
Pass under the expressway and turn left at first traffic light onto Woodcliff Drive. At top of the hill turn left at hotel sign.

DIRECTIONS

PIER 45

Port Terminal Building
1000 North River Street
Rochester, NY 14612



From Woodcliff Hotel and Spa

Head southwest on Woodcliff Dr toward NY-96 N/Pittsford Victor Rd.

Turn right at NY-96 N/Pittsford Victor Rd.

Take the ramp onto I-490 W and travel to and take exit 21 for NY-590 N.

Keep right at the fork, follow signs for I-590 S and merge onto NY-590 N.

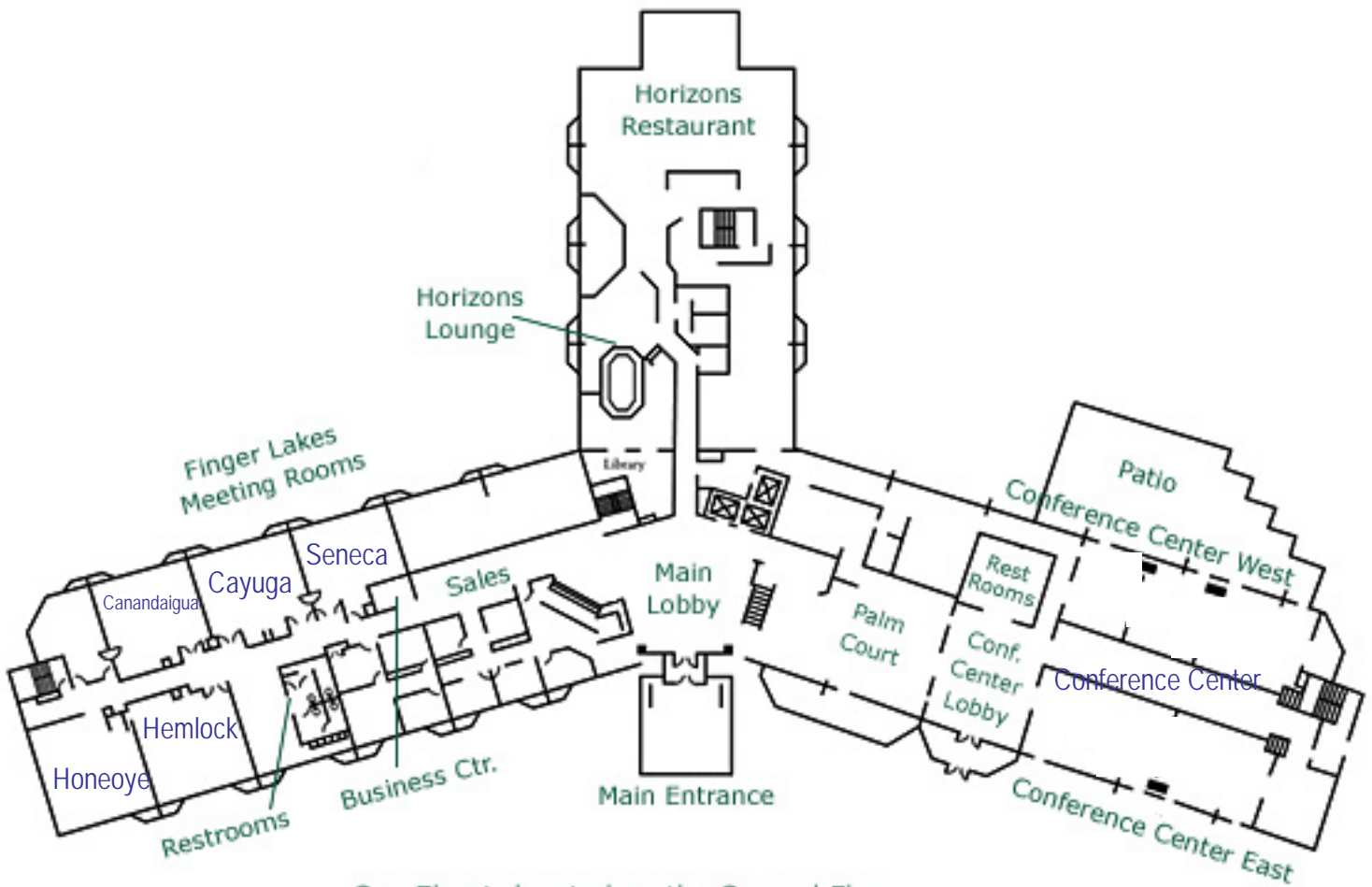
Take exit 10A to merge onto NY-104 W/Ridge Rd W.

Turn right at Lake Ave.

Turn right at Port Access Rd.

Woodcliff Conference Center – 1st Floor

FIRST FLOOR



Spa Elan is located on the Second Floor
The Pittsford Room is located on the third floor
Fitness Center and Pool are located on the lower level

PROGRAM SUMMARY
4th Annual CEIRS Network Meeting
 University of Rochester, Woodcliff Hotel and Spa

Monday, August 2	Registration for participants arriving on Monday	3:00-5:00 pm Palm Court / Conference Center Lobby
Tuesday, August 3	Registration and Breakfast	7:30-8:30 am Horizons Lounge and Palm Court / Conference Center Lobby
	Welcome	8:30 am Conference Center
	Session #1 - Immunology - activation and response	8:50-12:00 pm Conference Center
	Lunch	12:00-1:00 pm Horizons Lounge and Palm Court/Conference Center Lobby
	Session #2 - Pathogenesis – virulence and host	1:00-4:25 pm Conference Center
	Breakout Session 1	4:35-5:30 pm Conference Center West, Conference Center East, Cayuga Room
	Poster Session	5:30-6:30 pm Palm Court/Conference Center Lobby
	Dinner	6:30 pm Horizons Restaurant <i>Located next to the hotel lobby</i>
	Poster Session - continuation	7:30-8:30 pm Palm Court/Conference Center Lobby
Wednesday, August 4	Breakfast	7:30-8:00 am Horizons Lounge and Palm Court / Conference Center Lobby
	Welcome and housekeeping	8:00-8:10 am Conference Center
	Session #3 - Virology: the Hemagglutinin and the Polymerase	8:10-11:00 am Conference Center
	Session #4 - CEIRS in the Future - research priorities for 2011 and beyond	11:00-11:55 am Conference Center
	Lunch	12:00-1:00 pm Horizons Lounge and Palm Court/Conference Center Lobby
	Network Executive Committee Meeting	Honeyoye Room
	Session #4 - CEIRS in the Future - research priorities for 2011 and beyond - <i>continuation</i>	1:00-2:05 pm Conference Center

	Breakout Session 2	2:15-3:15 pm Conference Center West, Conference Center East
	Pier 45 Board Bus to Lake Ontario and Pier 45 Dinner Return Bus back to Woodcliff Hotel and Spa	3:30-3:45 4:30-8:30 8:45-9:30
Thursday, August 5	Breakfast	7:30-8:00 am Horizons Lounge and Palm Court / Conference Center Lobby
	Welcome and housekeeping	8:00-8:10 am Conference Center
	Session #5 - Avian Influenza Surveillance	8:10-9:55 am Conference Center
	Session #6 - Surveillance in Swine and Humans	9:55-1:00 pm Conference Center
	Session #7 - Meeting wrap up Lunch and departures	1:00-2:00 pm Horizons Lounge and Palm Court / Conference Center Lobby

Additional Scheduled Meeting:

Data Management Meeting: Thursday & Friday, August 5-6

Hemlock Room



Centers of Excellence for Influenza Research and Surveillance (CEIRS)

4th Annual CEIRS Network Meeting

Participant Arrival - MONDAY AUGUST 2, 2010

3:00-5:00	Registration	Palm Court/Conference Center Lobby
7:30-8:30	Registration and breakfast	Horizons Lounge Palm Court/Conference Center Lobby
8:30-8:50	Welcome and introductions John Treanor Diane Post	Conference Center

Session #1 Immunology activation and response

Moderators:	Paul Thomas and Andrea Sant	Conference Center
8:50-9:00	Introduction to the session- Paul Thomas	
9:00-9:20	Feda Masseoud (IPIRC): Original antigenic sin responses to avian influenza viruses	
9:20-9:40	David Topham (NYICE): Immune responses to experimental and licensed vaccines against emerging influenza viruses	
9:40-10:00	Rafi Ahmed (IPIRC): B cell responses in 2009 H1N1 infections	
10:00-10:20	Break	Palm Court/Conference Center Lobby
10:20-10:40	Andrea Sant (NYICE): Encounter with seasonal vaccines and viruses primes memory CD4 T cells capable of recognizing the pandemic H1N1 influenza virus	Conference Center

10:40-11:00	Tim Mosmann (NYICE): Cytokine diversity in human T cell responses to influenza	
11:00-11:20	Irene Ramos (CRIP): Human immune cell activation by influenza viruses with different receptor specificities	
11:20-11:40	Hongyu Miao (NYICE): Multilevel modeling of complex system dynamics in immune responses to influenza A virus infection	
11:40-12:00	Summary and discussion of session 1	
12:00 - 1:00	Lunch	Horizons Lounge and Palm Court/Conference Center Lobby

Session #2 Pathogenesis virulence and host

1:00-1:10	Introduction to the session- Ralph Tripp	Conference Center
1:10-1:30	Christopher Siebert (CRIP): Oseltamivir resistant novel H1N1 viruses lack attenuation in the guinea pig transmission model	
1:30-1:50	Gabrielle Neumann (CRIP): Biological and structural characterization of a host-adapting amino acid in influenza virus	
1:50-2:10	Sander Herfst (CRIP): Changes in pathogenicity of pandemic H1N1 viruses as a result of mutations and reassortment	
2:10-2:30	Wenjun Ma and Jurgen Richt (SJCEIRS): Viral reassortment and transmission after co-infection of pigs with classical H1N1 and triple reassortant H3N2 swine influenza viruses	
2:30-2:50	Mark Tompkins (IPIRC): Transmission and pathogenesis of H1 influenza viruses in ferrets	
2:50-3:10	Break	Palm Court/Conference Center Lobby
3:10-3:30	Ralph Tripp (IPIRC): AIV Infection and the cytokine response by normal human bronchial epithelial cells	Conference Center
3:30-3:50	Christine Oshansky and Paul Thomas (SJCEIRS): Pathogenesis of acute influenza infection in adults and children.	

3:50-4:10 Haruko Ogawa (CRIP): H4N8 subtype avian influenza virus isolated from stints and gulls in Japan causes a severe clinical phenotype in mice

4:10-4:25 Summary and discussion of session 2

4:25-4:35 Break (Breakout session setup)

4:35 5:30 Breakout Session 1

- Bird Surveillance and Epidemiologic Coordination (moderator: Stallknecht) Conference Center West
- Animal Models (moderator: Tripp) Cayuga Room
- New technologies in virology (moderator: Russell) Conference Center East

5:30-6:30 POSTER Session Palm Court/Conference Center Lobby

6:30 **Dinner** Horizons
Located next to the hotel lobby

7:30-8:30 POSTER Session Palm Court/Conference Center Lobby

7:30-8:00	Breakfast	Horizons Palm Court/Conference Center Lobby
8:00-8:10	Welcome and housekeeping	Conference Center
Moderators:	Toru Takimoto and Ron Fouchier	Conference Center
8:10-8:20	Introduction to the session- Toru Takimoto	
8:20-8:40	Summer Galloway (IPIRC) Broad spectrum analysis of influenza A HA subtypes for cleavage-activation and membrane fusion properties	
8:40-9:00	Gary R. Whittaker (NYICE): Modifications to the hemagglutinin cleavage site control virulence of a neurotropic H1N1 influenza virus	
9:00-9:20	Baek Kim (NYICE): Cross-talk between polymerase accuracy and replication strategies of influenza A virus	
9:20-9:40	Toru Takimoto (NYICE): Mutations in the avian-derived PA gene contribute to host adaptation of the 2009 pandemic influenza A polymerase.	
9:40-10:00	Lindomar Pena (CRIP): Modifications in the polymerase genes of a swine-like triple reassortant influenza virus to generate live attenuated vaccines against 2009 pandemic H1N1 viruses	
10:00-10:20	Richard Scheuermann (IRD): Sequence feature variant type approach to identify genetic determinants of virus characteristics in the influenza research database	Conference Center
10:20-10:40	Summary and discussion of session #3	
10:40-11:00	Break	Palm Court/Conference Center Lobby

Moderators:	Michael Osterholm and Adolfo Garcia-Sastre	Conference Center
11:00-11:10	Introduction to the session- Michael Osterholm	
11:10-11:25	John Treanor (NYICE): The agenda for vaccine development - what do we really need to know	
11:25-11:40	Richard Compans (IPIRC): Research priorities leading to better therapeutics and diagnostics	
11:40-11:55	Adolfo Garcia-Sastre (CRIP): Research priorities related to basic influenza research	
11:55-1:00	Lunch <i>Network Executive Committee Meeting</i> <i>CE Administrators Meeting</i>	Palm Court/Conference Center Lobby Honeoye Room Cayuga Room
1:00-1:15	Michael Osterholm (MCEIRS): Priorities for CEIRS research post-2009 H1N1 pandemic: lessons learned	Conference Center
1:15-1:30	Richard Webby (SJCEIRS): Where should surveillance be directed, and how to get there; best steps for coordination	
1:30-1:45	Carol Cardona (MCEIRS): Approaches to surveillance coordination and laboratory quality assurance producing consistent data	
1:45-2:05	Summary and discussion of session #4	
2:05-2:15	Break (Breakout session room setup)	Palm Court/Conference Center Lobby
2:15 3:15	Breakout Session 2	
	<ul style="list-style-type: none"> Wild Bird global AI model prediction platform (moderateor: Fouchier) 	Conference Center West
	<ul style="list-style-type: none"> New Technologies in Immunology (moderator: Mosmann) 	Conference Center East
3:30-3:45	Board Bus to Lake Ontario and Pier 45	Hotel Lobby
4:30-8:30	Dinner at Pier 45	Pier 45 <i>Located in Rochester, NY on Lake Ontario</i>
8:45-9:30	Board Bus back to Woodcliff Hotel and Spa	

7:30-8:00	Breakfast	Horizons Lounge Palm Court/Conference Center Lobby
8:00-8:10	Welcome and housekeeping	Conference Center

Session #5 Avian Influenza Surveillance

Moderators:	Carol Cardona and Jon Runstadler	Conference Center
8:10-8:15	Introduction to the session- Jon Runstadler	
8:15-8:35	David Stallknecht (MCEIRS): Natural history of avian influenza in Minnesota ducks: capturing subtype diversity on a small temporal and spatial scale	
8:35-8:55	Guan Yi (SJCEIRS): Establishment and lineage replacement of H6N2 influenza viruses in domestic ducks in southern China (2000 - 2007).	
8:55-9:15	Justin Brown (MCEIRS): Understanding the factors that influence low pathogenic avian influenza virus infection in ducks and gulls	
9:15-9:35	Richard Slemons (MCEIRS): Gaining insight into the natural history of influenza A viruses and the ecology and epidemiology of influenza A virus infections in waterfowl using the Mississippi Migratory Bird Flyway	
9:35-9:55	Summary and discussion of session #5	

Session #6 Surveillance in Swine and Humans

Moderators:	Gavin Smith and Robert Webster	Conference Center
9:55-10:05	Introduction to the session- Robert Webster	
10:05-10:25	Malik Peiris (SJCEIRS): Epidemiology and household transmission of pandemic and seasonal influenza A in 2009	
10:25-10:45	Dhanasekaran Vijaykrishna (SJCEIRS): Swine influenza (H1) from long-term systematic surveillance (1998-2010) in Hong Kong	
10:45-11:05	Pravina Kitikoon (MCEIRS): Pandemic H1N1/2009 in Thai swine farms, 2009-2010	

- 11:05-11:25 Apiradee Theamboonlers (MCEIRS):
Pandemic H1N1/2009 surveillance in
Thailand
- 11:25-11:45 Mohamed Ali (SJCEIRS): Overview of
research activities in Egypt
- 11:45-12:05 Mariette Ducatez (SJCEIRS): Active swine
influenza surveillance in the United States of
America
- 12:05 – 12:25 Discussion and summary of session #6
- 12:25-1:00 Summary of oral and poster presentations and directions for the future

Session #7 Meeting wrap up

- 1:00-2:00 **Lunch and departures** Palm Court/Conference Center Lobby
- 2:00-5:30 Data Management Meeting Hemlock Room



Centers of Excellence for Influenza Research and Surveillance (CEIRS)

4th Annual CEIRS Network Meeting Poster Titles and Presenters August 3rd, 2010

Immunology

Poster #	Title	Presenter(s)	CEIR S
1	Contemporary seasonal A (H1N1) influenza virus infection primes for a more robust response to split inactivated pandemic A(H1N1) vaccination in ferrets	Ali H. Ellebedy Richard J. Webby	SJCRH
2	Correlation of cell mediated immunity and serum antibody in young and aged adults receiving inactivated monovalent pandemic H1N1 vaccines	Jane Baer	NYICE
3	An animal model of immunity and protection following vaccination with drifted variants of avian influenza H5 hemagglutinin	Felix Santiago	NYICE
4	Pre-existing cross-reactive human CD8 T cell responses to pandemic H1N1 influenza virus in healthy adults without prior history of infection with 2009 pandemic strain	Kristin Scheible	NYICE
5	Alternative mechanisms of heterosubtypic protection against lethal 2009 pandemic H1N1 influenza infection	Hailong Guo	NYICE
6	Encounter with seasonal vaccines and viruses primes memory CD4 T cells capable of recognizing the pandemic H1N1 influenza virus	Katherine A. Richards	NYICE
7	Counting dendritic cells expressing influenza antigens with a Reverse Elispot assay	Alexandra M. Livingstone	NYICE
8	Antigenic characteristics of the 2009 H1N1 pandemic influenza A virus: cross-protection between the 1918 and 2009 H1N1 viruses	Balaji Manicassamy	CRIP
9	Antigenic relations between influenza A/H1N1 viruses and potential vaccine mismatch through adaptation	Miranda de Graaf	CRIP
10	Differences in heterosubtypic immune response in the mouse and ferret models in influenza A virus infection?	Danielle M. Hickman	CRIP
59	AIV Infection and the Cytokine Response by Normal Human Bronchial Epithelial Cells	Ralph Tripp	IPIRC
61	Dermal Influenza Immunization Using Coated Microneedles Elicits a Local Inflammatory Response and Dendritic Cell Migration	Maria Martin	IPIRC
62	Evaluation of the new H1N1 influenza HA DNA vaccine for protection against homologous and heterologous influenza virus challenge	Chinglai Yang	IPIRC
63	Evaluation of Vaccination Against Influenza Infection by Aerosol Delivery in a Mouse Model	Jennifer Humberd Smith	IPIRC
65	MHC Class I Ligands Screening in the 2009 Pandemic H1N1 Influenza Virus Through UV-mediated Peptide Exchange	Mitra Azadniv	NYICE
73	Influenza-specific IgM antibodies persist for a lifetime	Lakshmi Priyadarshini Sathyabhama	IPIRC
74	Long term protective immunity against the pandemic 2009 H1N1 swine origin influenza virus generated after transdermal delivery	Dimitrios G. Koutsonanos	IPIRC
87	The influenza-specific B cell response in HLA-DR1 Tg mice: modulation by virus strain and form of immunization	Aarthi Sundararajan	NYICE

4th Annual CEIRS Network Meeting Poster Titles and Presenters August 3rd, 2010

Pathogenesis

Poster #	Title	Presenter(s)	CEIRS
11	Does pandemic A/H1N1 virus have the potential to become more pathogenic?	Natalia A. Ilyushina Mariette F. Ducatez	SJCRH
12	Cross-clade protective vaccine developed from reconstructed ancestral H5N1 influenza viruses.	Mariette F. Ducatez	SJCRH
13	Peroxisome proliferator-activated receptor and AMP-activated protein kinase agonists protect against lethal influenza virus challenge in mice.	Jerry R. Aldridge	SJCRH
15	Comparing the tropism of the pandemic H1N1/2009 influenza virus with seasonal influenza virus and swine influenza viruses in ex vivo and in vitro cultures of human conjunctiva and respiratory tract.	Michael CW Chan Malik Peiris	SJCRH
16	Obesity is a risk factor for developing severe influenza infection.	Stacey Schultz-Cherry	SJCRH
17	Minimal impacts of PB1-F2 expression by the 2009 pandemic influenza A virus on virulence in animal models	Rong Hai	CRIP
18	Impact of PB1-F2 expression on the virulence of highly pathogenic avian influenza A viruses	Mirco Schmolke	CRIP
19	Transmission of a 2009 pandemic influenza virus shows similar sensitivity to temperature and humidity as an H3N2 seasonal strain	John Steel	CRIP
20	Increased pathogenicity of pandemic H1N1 influenza virus upon reassortment with a seasonal H3N2 strain	Eefje J. A. Schrauwen	CRIP
21	Pandemic H1N1:H9N2 reassortants transmit via respiratory droplet	JB Kimble	CRIP
22	Characterisation of a DBA.2 mouse model of influenza virus pathogenicity	John Steel	CRIP
23	PB1-F2 is a second IFN antagonist of influenza viruses	Zsuzsanna T. Varga	CRIP
25	From Predicting local AI Risk in the Pacific Rim towards the globe prediction: Applications and needs	Falk Huettmann	CRIP
64	Probing the Human Proteome to Identify Proteases Required for Influenza Replication as a Disease Intervention Strategy	Victoria A. Meliopoulos	IPIRC
75	Evaluating the Human Kinome to Identify Kinase Genes Required for Influenza Replication	Lauren E. Andersen	IPIRC
76	Determining Risk Factors for Influenza Infections in Turkeys: Results of a Regional Surveillance Study of Minnesota Turkey Flocks, 2007 – 2008	Cesar Corzo	MCEIRS
78	Molecular characterization of influenza A viruses from swine for potential virulence markers	Susan Detmer	MCEIRS

4th Annual CEIRS Network Meeting Poster Titles and Presenters August 3rd, 2010

Surveillance

Poster #	Title	Presenter(s)	CEIRS
26	Surveillance for pandemic influenza in families	Carrie Nolan	NYICE
28	Source-sink dynamics of seasonal H3N2 human influenza A virus.	Justin Bahl and Gavin JD Smith	SJCRH
30	Analysis of co-infections with pandemic A/H1N1 (2009) and seasonal A/H1N1 during the 2009 influenza season in New Zealand using a new genotyping assay.	Stephanie Sonnberg	SJCRH
31	Evidence of Infection with H4 and H11 Avian Influenza among Lebanese Chicken Growers.	Ghazi Kayali	SJCRH
32	Influenza surveillance program in swine in Southern China (Dec 2009-Jun 2010).	Huachen Zhu Yi Guan	SJCRH
33	A Modular Dataflow Architecture for Influenza A Virus Surveillance, Viral Isolate Characterization, Experimental Infection, and Sequence Data in the Center for Research on Influenza Pathogenesis (CRIP)	Eric Bortz	CRIP
34	The ecology and evolution of avian influenza A viruses in wild birds in Georgia	Nicola S. Lewis	CRIP
35	Linking surveillance of avian influenza viruses in wild birds with outbreaks in poultry	J.H.Verhagen	CRIP
36	Isolation and characterization of H6 influenza viruses isolated from Rosy-billed pochards (<i>Netta peposaca</i>) in Argentina: South American lineage of avian influenza viruses.	Ariel Pereda	CRIP
37	Surveillance of avian influenza in wild birds, Guatemala, Central America	Ana Slivia González-Reiche	CRIP
38	A/CA/04/2009 (H1N1) and Swine Influenza Isolates, Viral Stability Under Different Environmental Conditions	Rebecca Poulson	MCEIRS
40	Potential errors associated with AIV prevalence estimates derived from virus isolation and RT PCR data: A moving target	David Stallknecht	MCEIRS
41	Ecology and epidemiology of influenza A infections: using genetic, elemental, and isotopic biomarkers to determine the origins of wild, migratory mallards accessioned into type A influenza virus surveillance investigations	Tony Fries	MCEIRS
42	Type A influenza virus activity at interfaces between wild and captive birds at Zoos in Ohio	Jacqueline Nolting	MCEIRS
43	Surveillance for pH1N1 in Kenyan ecosystems - preliminary findings	Peninah Munyua	MCEIRS
44	Age and species-specific variation of influenza seroprevalence among migratory waterfowl in Alaska	J.A. Runstadler	CRIP
45	Surveillance of avian influenza virus (AIV) in migratory waterfowl in eastern Hokkaido, Japan	Vuong Nghia Bui	CRIP
46	Avian influenza virus in breeding and wintering populations of waterfowl in North America: A flyway perspective	Walter M. Boyce	CRIP

4th Annual CEIRS Network Meeting Poster Titles and Presenters August 3rd, 2010

Surveillance - continued

Poster #	Title	Presenter(s)	CEIRS
47	Evaluation of Canada geese (<i>Branta canadensis</i>) as sentinels to detect transmission of avian influenza viruses	Whitney Kistler	MCEIRS
68	Influenza virus transmission rates in vaccinated and non-vaccinated pig populations	Anna Romagosa Montserrat Torremorell	MCEIRS
71	Virological Surveillance of Avian Influenza Viruses in a Live-Bird Market and Wild Birds in Taiwan, 2008-2010	Chang-Chun Lee	IPIRC
79	Surveillance of influenza A in Live Bird Markets in Thailand, 2009	Trong Wisedchanwet	MCEIRS
80	Genetic characterization of H4N6 and H4N9 from ducks in live bird markets in Thailand	Trong Wisedchanwet	MCEIRS
81	Study of classical swine H1 (Swine Cluster a and Swine Cluster b) and human-like H3 (Human Cluster a and Human Cluster b) swine influenza viruses from pigs in provinces with high density swine populations in Thailand	Pravina Kitikoon	MCEIRS
82	A single-step RT-PCR assay for detection and differentiation between swine H1N1 virus and pandemic H1N1/2009 virus in Thai swine samples	Pravina Kitikoon	MCEIRS
83	Surveillance and detection of oseltamivir resistance of the human pandemic influenza (H1N1) based on TaqMan real-time RT-PCR	Apiradee Theamboonlers	MCEIRS
84	Phylogenetic analysis of human pandemic influenza A virus (H1N1) in Thailand	Apiradee Theamboonlers	MCEIRS
86	Uncovering Hidden Diversity in Avian Influenza A Viruses Through New Generation Sequencing	Srinand Sreevatsan	MCEIRS

4th Annual CEIRS Network Meeting Poster Titles and Presenters August 3rd, 2010

Virology

Poster #	Title	Presenter(s)	CEIRS
48	The HA protein receptor-binding domain produced in <i>Escherichia coli</i> folds into its native, immunogenic structure.	Charles J. Russell	SJCRH
49	Thermostability of subpopulations of H2N3 influenza isolates from Mallard ducks.	Nicholas J. Negovetich	SJCRH
50	Investigation into the role PB2 plays in determining the thermostability of IAV Polymerase Complex	Jonelle Mattiaccio	NYICE
51	Establishment and characterization of an intestinal epithelial cell line from Pekin ducks as a model for influenza virus infection	Yueting Zhang Gary R Whittaker	NYICE
52	Influenza Virus NS1: Regulation of type I interferon pathways and basis for live attenuated influenza vaccines.	Randy A. Albrecht	CRIP
53	Characterization of the 2009 pandemic H1N1 influenza A virus NS1 protein	Ben Hale	CRIP
54	Phylogenetic predictions to trace host adaptation of H2N2 influenza viruses	Martin Linster	CRIP
55	Fitness of Pandemic H1N1 and Seasonal influenza A viruses during Co-infection	Matthew Angel	CRIP
56	Development and characterization of a highly specific and sensitive SYBR Green RT-PCR assay for detection of the 2009 pandemic H1N1 influenza virus based on sequence signatures.	Rafael A. Medina	CRIP
58	Characterization of pseudorevertants arising from murine and urine and tissue culture passage of an influenza virus with a mutation in a conserved residue in the HA protein	Konrad Bradley	IPIRC
60	Broad spectrum analysis of influenza A HA subtypes for cleavage-activation and membrane fusion properties	Summer Galloway	IPIRC
85	Studying Influenza Fusion Kinetics At A Single Particle Level Using Proton Cages	Deirdre Costello	NYICE
88	A novel mucosal vaccine against influenza and other respiratory viral pathogens	Luis Martinez	NYICE

4th Annual CEIRS Network Meeting

Data Management Meeting

University of Rochester, Woodcliff Hotel and Spa

Thursday, August 5 DAY 1	Moderators: IRD, CEIRS Data Management Teams, NIAID **Snacks and drinks to be provided during break**	
	Presentation and discussion by IRD Richard Scheuermann, Ed Klem, IRD <ul style="list-style-type: none"> - Brief overview of re-design and other 2010 accomplishments - Overview of activities in which IRD supports the CEIRS network - Highlight needs to improve the dataflow - Suggestions to the CEIRS to improve dataflow 	2:00–2:45 pm Hemlock Room
	NYICE moderated discussion <ul style="list-style-type: none"> - 3 slides of NYICE’s data management systems and how it benefits local investigators - NYICE lead discussion from their 1-page topics list - NYICE lead discussion of recommendations, features, and analysis tools to IRD 	2:45–3:15 pm Hemlock Room
	Break	3:15–3:30 pm
	Emory moderated discussion <ul style="list-style-type: none"> - 3 slides of Emory’s data management systems and how it benefits local investigators - Emory lead discussion from their 1-page topics list - Emory lead discussion of recommendations, features, and analysis tools to IRD 	3:30–4:00 pm Hemlock Room
	CRIP moderated discussion <ul style="list-style-type: none"> - 3 slides of CRIP’s data management systems and how it benefits local investigators - CRIP lead discussion from their 1-page topics list - CRIP lead discussion of recommendations, features, and analysis tools to IRD 	4:00–4:30 pm Hemlock Room
	St Jude moderated discussion <ul style="list-style-type: none"> - 3 slides of St Jude’s data management systems and how it benefits local investigators - St Jude lead discussion from their 1-page topics list - St Jude lead discussion of recommendations, features, and analysis tools to IRD 	4:30–5:00 pm Hemlock Room
	General discussion about guiding principles, and other items from the topics list	5:00–5:30 pm Hemlock Room

Friday, August 6 DAY 2	Moderators: NIAID, CEIRS Data Management Teams **Snacks and drinks to be provided during break, box lunch provided at 12:30**	
	NIAID DM update since the March meeting ----- Diane Post and Michael Saylor	8:30–9:00 am Hemlock Room
	MCEIRS moderated discussion - 3 slides of MCEIR's data management systems and how it benefits local investigators - MCEIRS lead discussion from their 1-page topics list - MCEIRS lead discussion of recommendations, features, and analysis tools to IRD	9:00–9:30 am Hemlock Room
	General discussion about MDFs, guiding principles, and other items from the topics list	9:30–10:30 am Hemlock Room
	Break	10:30–10:45 am
	General discussion about MDFs, guiding principles, and other items from the topics list	10:45–12:30 pm Hemlock Room

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