



10th Annual CEIRS Network Meeting

Sunday July 16th, 2017 – Wednesday July 19th, 2017

Atlanta Marriot Century Center

2000 Century Blvd NE

Atlanta, GA 30345

Hosted By:

Emory-UGA Center of Excellence in Influenza
Research and Surveillance

Sponsored By:

NIH/NIAID CEIRS Program



Welcome to Atlanta, Georgia

Dear Colleagues,

Welcome to the 10th Annual Network 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 Diseases, Division of Microbiology and Infectious Diseases and the Emory-UGA Center of Excellence in Influenza Research and Surveillance.

With over 300 participants, almost 60 presentations & updates, a panel discussion and a debate, the meeting promises to be very informative. Instead of starting with our breakout sessions, we will have a wonderful trainee workshop organized by Lauren Sauer from JHCEIRS. Our NIAID representatives have also scheduled some teambuilding and getting to know you sessions to lighten the information overload and encourage comradery. We are also eagerly awaiting the results from the CEIRS Underdogs and the Viral Characterization Pipeline

Our evening venues provide merely an introduction to Atlanta. With the elegance of Fernbank Museum and the tastings of Sweetwater Brewing Company, we hope you will be encouraged to visit more of our city. If you plan to walk, we strongly encourage carrying water as Atlanta earns the nickname “Hotlanta” throughout our very long summer and especially in July.

If you have a chance, please stop by the registration table and thank Robin Worthy for all of her hard work on this meeting and for CEIRS. Robin did the bulk of the organization and planning for this meeting and will be retiring next month. She will be sorely missed by all of us at Emory-UGA CEIRS.

Sincerely,

Diane Post
Program Officer
NIAID/DMID

Walt Orenstein
PI/Director
Emory-UGA CEIRS

Dick Compans
PI/Co-Director
Emory-UGA CEIRS



10th Annual CEIRS Network Meeting

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Atlanta Marriot Century Center
2000 Century Blvd NE
Atlanta, GA 30345

From the Atlanta Airport to the Marriott Century Center Hotel:

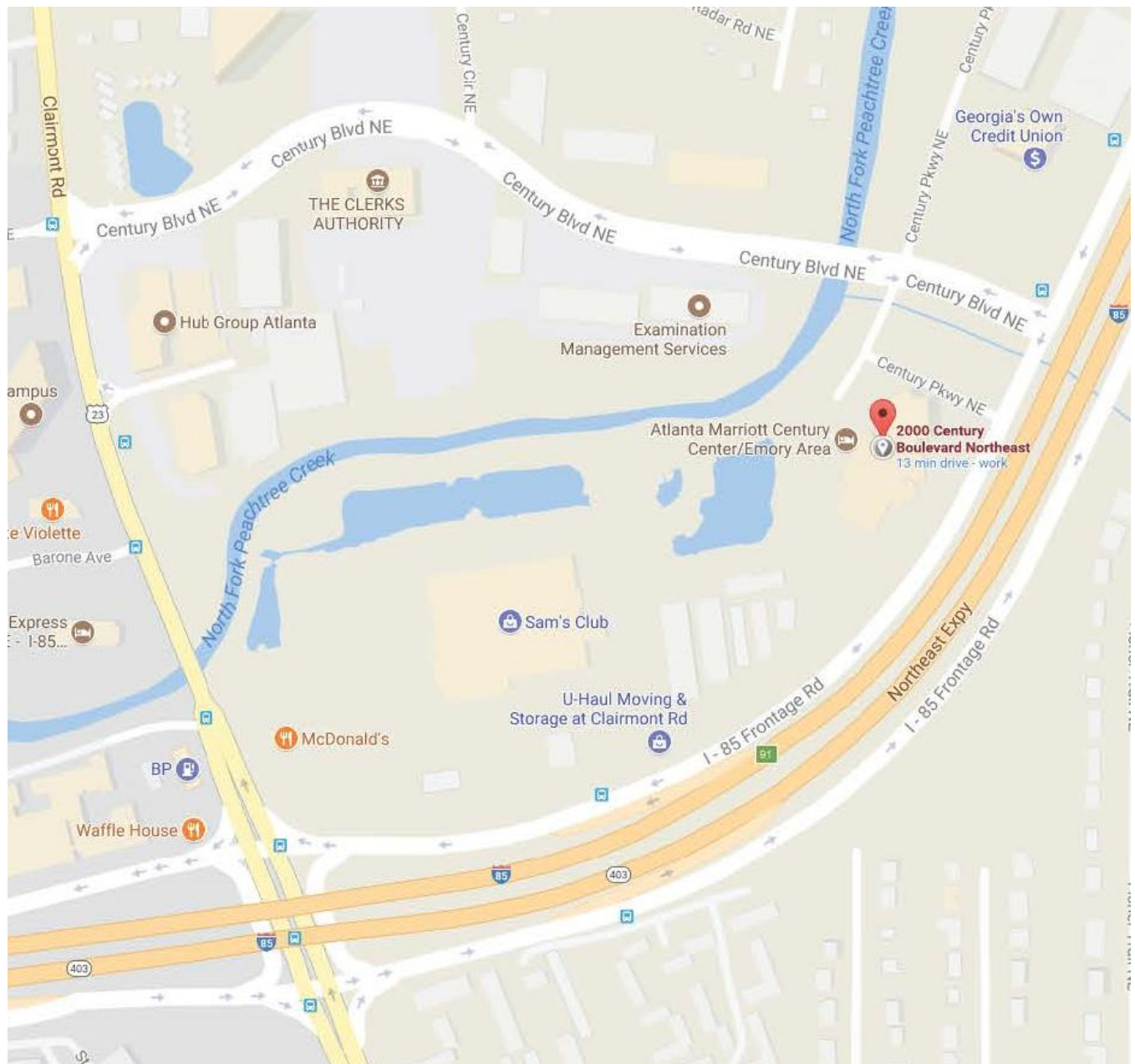
1. **Taxi**- normally you will find a Taxi when you exit the Airport. Price range from \$45 to \$65.
2. **Atlanta Superior Shuttle**, ([770\) 457-4794](tel:7704574794), reservation required, fee: \$30 USD (**one way**); \$50 USD (**roundtrip**). Please verify the fee with Atlanta Superior Shuttle as they may change.
3. **Lyft**, car rideshare service. Estimated cost from the Atlanta Airport is \$18-40 depending on service desired and surge pricing.
4. **Public Transportation 'MARTA'**... fee: \$1 (**one time purchase**) for the Breeze card and (\$2.50 USD (**one way**), from Atlanta Airport to Brookhaven Station on the "**Gold**" Line. The ride is approximately 35mins.

The hotel has a complimentary shuttle for our guests from the Brookhaven station between the hours of **7am-10pm - 7 days**. Please call the hotel at **(404) 325 -0000** once you arrive at the Brookhaven Station to request the complimentary hotel shuttle.

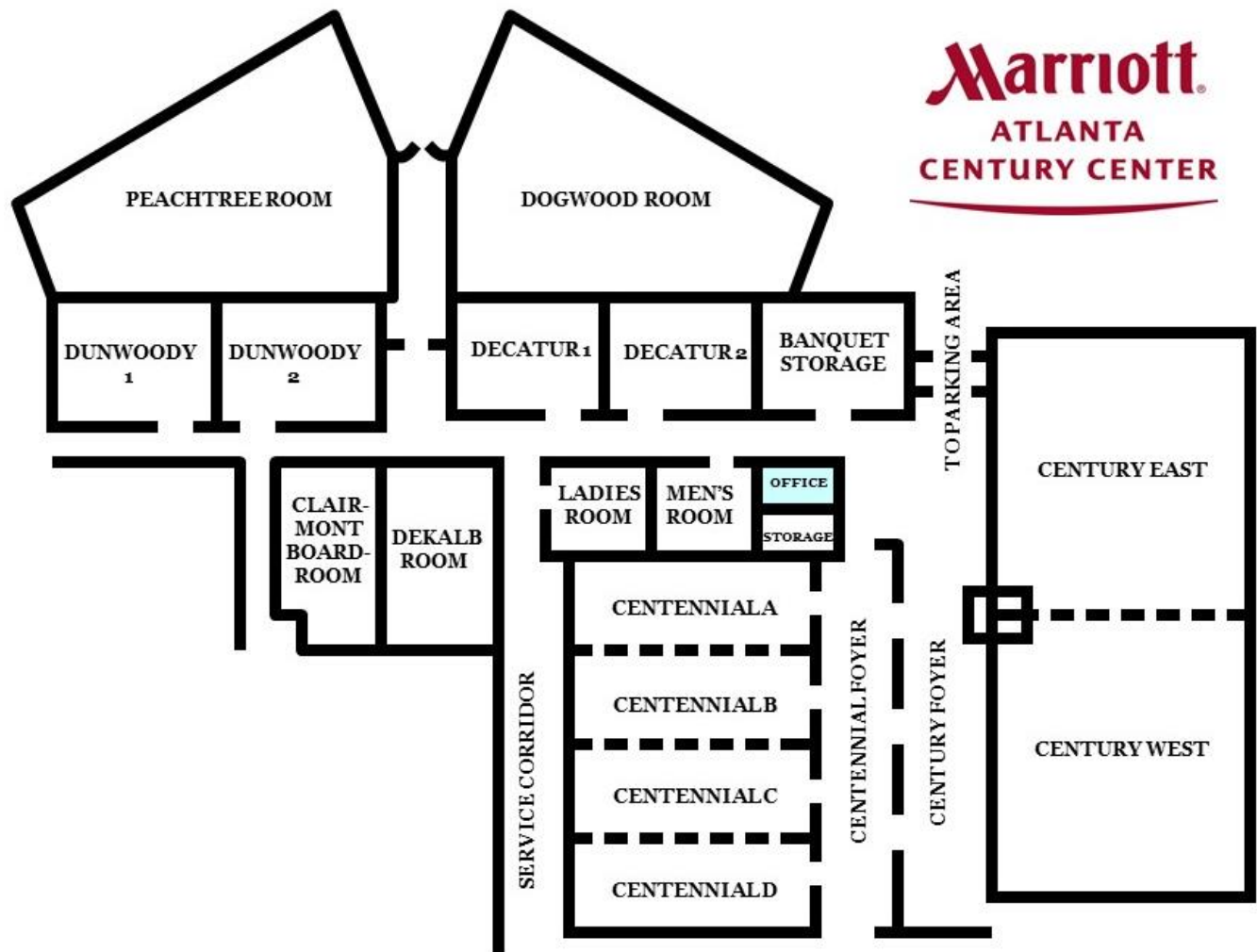


Map of the Century Center Business Park and surrounding area

Note to those individuals who choose to walk: It is very ill-advised to walk on the 85 Frontage Road. There is no sidewalk and heavy traffic. Keep in mind that mapping programs do not show fences when giving walking directions.



Layout of the Marriott Century Center Conference Rooms



****Meeting Rooms are not drawn to scale****

By request, the Clairmont Boardroom will be reserved as a lactation room and private prayer space. Please respect others who may be using the space by knocking before opening the door.

The DeKalb Conference Room will be reserved for luggage storage for anyone attending the conference who needs this service. The room will not be locked or guarded. Items left here are at your own risk.

Sunday Dinner is in the Centennial Ballroom.



Our conference space has wifi purchased by the hosts.
Log on to `Marriott_Conference`
When prompted to type in access code: `emory` (all lower case)

We are using an alternative to clickers for polling. Please open a browser and go to ceirs.cnf.io to find the poll questions.

Dinner on Monday will be at

Fernbank Museum of Natural History
767 Clifton Rd, Atlanta, GA 30307

www.fernbankmuseum.org

Busses will be provided to move attendees between the conference hotel and dinner location. The location has limited parking, so please use the bus if possible.

Marriott Century Center to Fernbank Museum of Natural History
Drive 2000 Century Blvd NE, Atlanta, GA 30345 to 767
Clifton Rd, Atlanta, GA 30307

2000 Century Blvd NE

1. Head east on Century Blvd NE toward Century Pkwy NE
 2. Use any lane to turn right onto I- 85 Access Rd/I - 85 Frontage Rd
 3. Use the left 2 lanes to turn left onto Clairmont Rd
 4. Turn right onto Lavista Rd NE
 5. Turn left onto Houston Mill Rd NE
 6. Turn left onto Clifton Rd
 7. Turn right to stay on Clifton Rd
- 767 Clifton Rd



Dinner on Tuesday will be at

SweetWater Brewing Company
195 Ottley Dr NE, Atlanta, GA 30324

<http://sweetwaterbrew.com>

Busses will be provided to move attendees between the conference hotel and dinner location. The location has limited parking, so please use the bus if possible.

Marriott Century Center to Sweetwater Brewing Company
Drive 2000 Century Blvd NE, Atlanta, GA 30345 to 195
Ottley Dr NE, Atlanta, GA 30324

2000 Century Blvd NE

Get on I-85 S in Brookhaven

1. Head east on Century Blvd NE toward Century Pkwy NE
2. Use any lane to turn right onto I- 85 Access Rd/I - 85 Frontage Rd
3. Use the left lane to merge onto I-85 S via the ramp to Atlanta
Continue on I-85 S to Atlanta. Take the Armour Dr exit from GA-13 S
4. Merge onto I-85 S
5. Take exit 86 toward Peachtree St
6. Merge onto GA-13 S
7. Take the Armour Dr exit toward Monroe Dr
Continue on Armour Dr NE. Drive to Ottley Dr NE
8. Turn right onto Armour Dr NE
9. Slight left onto Ottley Dr NE
Destination will be on the left
195 Ottley Dr NE

Complimentary SweetWater tastings for all guests – featuring the SweetWater year-round selections and seasonal styles depending on availability

- Up to (6) 6oz tastings per guest = 36 oz of beer per guest
- SweetWater souvenir tasting pint glass for all guests.



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2000 Century Blvd NE
Atlanta, GA 30345

Sunday July 16th, 2017

8:00AM - 7:00PM **Arrival and Check-in – Century Foyer (Luggage Storage in Dekalb)**

Trainee Session

Century Ballroom

8:30 - 9:00 Introduction and discussion of academics vs program careers Diane Post

9:00 – 9:30 How to choose a post doc and how to assess a potential mentor Ali Ellebedy

Concurrent Breakout Trainee Sessions: (Choose one)

9:30 – 10:30 Session 1: Peachtree Conference Room
Funding Mechanisms (and)

9:30- -10:00 Grant opportunities for trainees and Jr Fac and Award Types (grants vs contracts, etc.) Lauren Sauer

10:00 – 10:30 Behind the Curtain Mock Grant Review Andrew Pekosz

9:30 – 10:30 Session 2: Peachtree Conference Room

Applying and interviewing & the Chalk Talk

9:30- -10:00 Applying for Jobs and Tompkins' Tips for Effective Interviewing

10:00 – 10:30 The Chalk Talk
S. Mark Thompkins
Ali Ellebedy

Return to Century Ballroom

10:30 – 11:00 Transitioning from a trainee position Stacey Schultz Cherry

11:00 – 12:00 Moderated Panel Discussion and Q&A with Senior Investigators

12:00 - 12:30 **Boxed Lunch Pickup – Centennial Ballroom (Bring lunch to breakout meetings)**

Breakout meeting table is on the next page to avoid breaking across pages.

Breakout Meetings: Concurrent breakout meetings* for CEIRS members

Meeting TIME	Decatur 1	Peachtree	Dogwood	Dunwoody 1		Decatur 2
12:30 - 1:30	Data Management Lead: Erik Stemmy	Team Ferret Lead: Stacey Schultz-Cherry				
1:30 – 2:30		Avian Surveillance Lead: Dave Stallknecht & Scott Krauss	Human Surveillance/ Clinical Breakout Lead: Rich Rothman & John Treanor	Universal Flu Vaccine Lead: Diane Post		
2:30 – 3:30	Experimental Data Lead: Eric Bortz	Swine Surveillance Lead: Nicola Lewis, Amy Vincent & Martha Nelson				
3:30 – 4:30	DIGS Sequencing Lead: Harm van Bakel, Peter Thielen, Justin Bahl, Ralph Tripp	Virus-Host characterization Lead: Diane Post, Stacey Schultz-Cherry & Andy Pekosz				
4:30 – 5:30	Data Analysis Tools Lead: Justin Bahl					Pandemic Planning Advisory Committee (PPAC) Lead: Michael Osterholm
5:30 – 6:30	NYICE Center Breakout Session <i>(closed meeting)</i>	SJCEIRS Center Breakout Session <i>(closed meeting)</i>	CRIP Center Breakout Session <i>(closed meeting)</i>	JHCEIRS Center Breakout Session <i>(closed meeting)</i>		

6:30 - 9:00 Optional Welcome Reception – Centennial Ballroom

10 Years of CEIRS Presentations

7:00 – 7:20 Dave Stallknecht, Avian Influenza

7:40 – 8:00 Richard Webby, Swine Influenza

8:20 – 8:40 Adolfo Garcia-Sastre, Basic Influenza

Monday July 17th, 2017

7:30 - 5:00	Arrival and Check-In – Century Foyer (Luggage Storage in Dekalb)
11:00 - 5:00	Poster Session 1 Set-Up – Decatur 1 & 2
8:30 - 4:00	DPCC Tech and Training Bar – Dunwoody 2 The DPCC will host a hands-on training area during the meeting. We encourage drop-in visits from the community, where anyone can ask questions, troubleshoot issues, or demo the collaborative resources of the DPCC.

Meeting Opening - Century Ballroom

8:15 - 8:30	Welcome	Walt Orenstein and Diane Post
8:30 - 8:50	Update from DMID	Emily Erbeling
8:50 - 9:10	Emory/UGA Center Update	Walt Orenstein

Session #1: Outbreak Response – Century Ballroom

Session Chairs: Ghazi Kayali & Mary Pantin-Jackwood

9:10 - 9:30	Human H7N9 Disease	Malik Peiris
9:30 - 9:50	Development and risk assessment of the A(H7N9) influenza viruses across the five outbreak waves	Huachen Zhu
9:50 - 10:10	Evolution of H7N9 influenza viruses circulating in poultry in China	Hualan Chen
10:10 - 10:30	Break (If Purchased, Refreshments in Centennial Ballroom)	
10:30 - 10:50	H7N9 Highly Pathogenic Avian Influenza in the United States in 2017	David Suarez
10:50 - 11:10	Replication and transmission of a novel feline H7N2 virus in animal models	Gongxun Zhong
11:10 - 11:25	Session Summary/Discussion	
11:25 - 11:40	Update on Pandemic Preparedness	Mike Osterholm
11:40 - 12:00	Underdogs/CEIRS Risk Assessment Pipeline Update	Stacey Schultz-Cherry and Andy Pekosz
12:00 - 1:15	Lunch – Centennial Ballroom (If Purchased) NEC Lunch – Dunwoody 1	

Session 2: Avian Influenza – Century Ballroom

Session Chairs: Marjolein Poen & Becky Poulson

1:15 - 1:35	Avian Influenza Surveillance: detection of viral genomes by NGS using tracheal and cloacal swab material	Lucas Ferreri
1:35 - 1:55	Surveillance for Avian Influenza Virus in Wild Birds in Egypt, 2014-2016	Ahmed Kandeil
1:55 - 2:15	Expansion of influenza A virus surveillance in wild waterfowl to the Atlantic Migratory flyway, 2016	Jacqueline Nolting
2:15 - 2:30	Avian Working Group Update	Dave Stallknecht and Scott Krauss
2:30 - 2:50	SJCERS Center Update	Richard Webby
2:50 - 3:10	Break (If Purchased, Refreshments in Centennial Ballroom)	

PANEL DISCUSSION – Century Ballroom

3:10 - 3:45	<u>CEIRS and the Future</u>	Panelists:
	Moderator: Diane Post	
	Update from Transmission of Respiratory Viruses meeting	Hui-Ling Yen
	Update from NIAID Pathway to Universal Influenza Vaccine meeting	Rafi Ahmed
	DMID perspective	Emily Erbelding

Session 2: Avian Influenza (Continued) – Century Ballroom

3:45 - 4:05	Impact of single amino acid changes in the receptor-binding site of H9 hemagglutinin on receptor specificity and tissue tropism	Adebimpe Obadan
4:05 - 4:25	The Characterization of Influenza A Virus Adaptations During Propagation in Laboratory hosts	Kimberly Davis
4:25 - 4:40	Session Summary/Discussion	
4:40 - 5:00	Poster Session 1: 1 Minute Poster Presentations	

Poster Session 1 – Dunwoody 1 & 2

5:00 - 6:30	Poster Session
6:30 - 7:00	Travel to Dinner Fernbank Museum of Natural History 767 Clifton Rd, Atlanta, GA 30307
7:00 - 9:00	Dinner (Optional) “CEIRS Survivor” Teambuilding Activity

Tuesday July 18th, 2017

7:00 - 8:00	Arrival and Check-In – Century Foyer (luggage storage in Dekalb) Poster Session 2 Set-up – Decatury 1 & 2	
7:30 - 8:10	Optional Networking Breakfast – Centennial Ballroom	
8:10 - 8:15	Housekeeping – Century Ballroom	
8:15 - 8:30	DIGS Update	Justin Bahl

Session 3: Swine Influenza – Century Ballroom

Session Chairs: Constantinos Kyriakis and Tom Fabrizio

8:30 - 8:50	Rapid and long-scale dissemination of the emerging influenza A (H3N2) virus responsible for zoonotic cases via exhibition swine movement	Andrew Bowman
8:50 - 9:10	Sequence of prior live virus exposure to distinct influenza A subtypes altered severity of lung lesions following H1N1 challenge	Amy Vincent
9:10 - 9:30	Swine Working Group Update	Nicola Lewis and Amy Vincent
9:30 - 9:45	Session Summary/Discussion	
9:45 - 10:05	Break (If Purchased, Refreshments in Centennial Ballroom)	

Session 4: Human Influenza and Host Response – Century Ballroom

Session Chairs: Aubree Gordon and Jared Evans

10:05 - 10:25	JHCEIRS Center Update	Richard Rothman
10:25 - 10:45	Identification and recovery of influenza A H3N2 viruses and their association with clinical disease in the US capital region during the 2014-2015 season	Andrew Pekosz
10:45 - 11:05	Phylogenetic Analysis of 2016-17 Influenza Clinical Samples from Taiwan and the National Capital Region	Peter Thielen
11:05 - 11:25	Evolution of oseltamivir resistance in H1N1 using a high-throughput microfluidic device and whole-genome sequencing: a model for predicting resistance	Katy Shaw-Saliba
11:25 - 11:45	Interactions of influenza A virus with modified sialic acids	Karen Barnard
11:45 - 1:00	Lunch – Centennial Ballroom (If Purchased) Coordinator Lunch – Dunwoody 1 Private Session - Dogwood	
1:00 - 1:20	Natural Glycan Receptors for Influenza Virus in Human Lung	Richard Cummings
1:20 - 1:35	Session Summary/Discussion	
1:35 - 1:55	CRIP Center Update	Adolfo Garcia-Sastre

TEAMBUILDING ACTIVITY – Century Ballroom

1:55 - 2:25	Teambuilding: Get to know your fellow CEIRS Investigators!
2:25 - 2:45	Break (If Purchased, Refreshments in Centennial Ballroom)

Session 5: Pathogenesis & Transmission – Century Ballroom

No US Government appropriated funds were used to pay for food or beverages for this meeting.

Session Chairs: Randy Albrecht and Mark Tompkins

2:45 - 3:05	Absence of $\beta 6$ integrin protects highly susceptible obese mice from influenza infection	Victoria Meliopoulos
3:05 - 3:25	Nucleotide Preferences of Influenza Viral Polymerase	Zuleyma Peralta
3:25 - 3:45	Defining particle sizes that mediate airborne transmission of influenza A virus in ferrets	Hui-Ling Yen
3:45 - 4:05	Influenza A virus reassortment is limited by anatomical compartmentalization following co-infection via distinct routes of inoculation	Anice Lowen
4:05 - 4:25	Airborne-transmissible influenza A viruses are expelled from the upper respiratory tract of ferrets	Sander Herfst
4:25 - 4:40	Session Summary/Discussion	
4:40 - 5:00	DPCC Update	Stephan Bour
5:00 - 5:20	Poster Session 2: 1 Minute Poster Presentations	

Poster Session 2 – Dunwoody 1 & 2

5:30 - 6:30	Poster Session
6:30 - 7:00	Travel to Dinner SweetWater Brewing Company 195 Ottley Dr NE, Atlanta, GA 30324
7:00 - 9:00	Dinner (Optional)

Wednesday July 19th, 2017

8:10 - 8:15	Housekeeping – Century Ballroom (Luggage Storage in Dekalb Ballroom)	
8:15 - 9:00	Keynote Address: Deciphering the Contributions of Antibody Immunodominance and Glycan Modulation to Hemagglutinin Evolution	Jonathan Yewdell Senior Investigator, NIAID/DIR

Session 6: Immunity & Vaccines – Century Ballroom

Session Chairs: Ben Miller and Surender Khurana

9:00 - 9:20	Tipping the scales: how a SNP affects influenza severity in humans	E. Kaitlynn Allen
9:20 - 9:40	Tracking bone marrow plasma cells induced by influenza vaccination	Carl Davis
9:40 - 10:00	Pulmonary monocytes promote the establishment of lung tissue-resident CD8 T cell memory following influenza infection	Paul Dunbar
10:00 - 10:20	Break (If Purchased, Refreshments in Centennial Ballroom)	
10:20 - 10:40	Hemagglutinin head- and stalk-specific memory B cell expansion by seasonal H3N2 infection: implications for original antigenic sin-type responses and hemagglutinin imprinting	Mark Sangster
10:40 - 11:00	NYICE Center Update	John Treanor
11:00 - 11:20	Advanced age and low testosterone delay the resolution of CD8+ T cell responses following influenza virus infection in male mice	Sabra Klein
11:20 - 11:40	Contemporary H3N2 influenza viruses possess a new glycosylation site in antigenic site B that alters antibody binding	Seth Zost
11:40 - 12:00	Engaging strain-specific vs. cross-reactive hemagglutinin-specific B cells in humans: Lessons from H5N1 vaccination	Ali Ellebedy
12:00 - 1:15	Lunch – Centennial Ballroom (If Purchased)	
1:15 - 1:30	Ferret Core/Cell Core/Reagent Update	Victoria Meliopoulos
1:30 - 1:50	IRD Update	Richard Scheuermann
1:50 - 2:10	Robust memory recall response to influenza vaccination in pemphigus patients previously treated with B cell depletive therapy	Alice Cho

Decision 2017: Debate – Century Ballroom

2:10 - 2:50	Influenza Immunity: What is more important for overall immunity to influenza - B cells or T cells? Moderator: Daniel Perez Team T-Cells: Paul Thomas, Andrea Sant, Dave Topham, Jake Kohlmeier Team B-Cells: Patrick Wilson, Ali Ellebedy, Jens Wrammert, Maureen McCargil	
2:50 - 3:10	Break (If Purchased, Refreshments in Centennial Ballroom)	

Session #6: Immunity & Vaccines Cont. – Century Ballroom

Session Chairs: Rafi Ahmed and Sabra Klein

No US Government appropriated funds were used to pay for food or beverages for this meeting.

3:10 - 3:30	Limited efficacy of inactivated influenza vaccine in elderly individuals is associated with decreased antibody adaptability	Carole Henry
3:30 - 3:50	Early childhood CD4 T cell reactivity following vaccination with inactivated influenza vaccine	Jennifer Nayak
3:50 - 4:10	Natural and directed antigenic drift of the H1 influenza virus hemagglutinin stalk domain	David Topham
4:10 - 4:30	Avian A/H5 influenza A viruses from the A/goose/Guangdong/1/96 lineage: how to cope with antigenic diversity for vaccine design?	Mathilde Richard
4:30 - 4:50	Characterizing naturally occurring influenza virus hemagglutinin stalk domain variants	Ericka Kirkpatrick

Meeting Wrap-Up

4:50 - 5:00	Meeting Wrap-up (with polling)
--------------------	--------------------------------

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