

## 2015 Annual Meeting

Immune Deficiency & Dysregulation North American Conference April 9-12, 2015 | Hilton Americas | Houston, Texas

## FINAL PROGRAM





#### ABOUT THE CLINICAL IMMUNOLOGY SOCIETY

The Clinical Immunology Society (CIS), established in 1986, is the key interdisciplinary organization for the field of clinical immunology and is devoted to fostering developments in the science and practice of clinical immunology. CIS is an international professional organization which includes more than 600 clinicians, investigators, and trainees.

The mission of CIS is to facilitate education, translational research and novel approaches to therapy in clinical immunology to promote excellence in the care of patients with immunologic/inflammatory disorders.

The primary objectives and purposes of CIS are to:

- facilitate the interchange of ideas and information among physicians and other investigators who are concerned with immunological/inflammatory diseases;
- promote research on the causes and mechanisms of diseases relating to the immune system and, as a result, to unify concepts of disease pathogenesis;
- encourage investigators and clinicians to share in their knowledge of immunologically active drugs and other interventions;
- promote application and dissemination of recent advances in biomedical science for the prevention, diagnosis and treatment of diseases related to immunity and inflammation; and
- foster excellence in research and medical practice.

## JOIN US



## 2015 ANNUAL MEETING PROGRAM COMMITTEE CO-CHAIRS:

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Jean-Laurent Casanova, MD, PhD The Rockefeller University New York, NY

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#### **CIS NATIONAL OFFICE**

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#### National Office

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#### Dear Colleagues,

On behalf of the Clinical Immunology Society (CIS), thank you for participating in the 2015 Annual Meeting: Immune Deficiency & Dysregulation North American Conference taking place April 9-12, 2015 at the Hilton Americas in Houston, Texas.

CIS is the key inter-disciplinary organization for the field of clinical immunology and is devoted to fostering developments in the science and practice of clinical immunology. The mission of CIS is to facilitate education, translational research and novel approaches to therapy in clinical immunology and to promote excellence in the care of patients with immunologic/inflammatory disorders.

The CIS leadership and the members of the Program Committee have jointly defined our goals and have engaged clinicians and researchers from all types of backgrounds to try to identify the best manner of addressing the critical needs. The primary goal of the Annual Meeting is to provide an exciting venue for the presentation of the newest immune deficiency diseases and the pathogenesis of these defects in molecular terms. The substance of the conference will be cutting edge clinical and basic science research. Another goal is to educate clinicians regarding the state of the art clinical care. We recognize that physicians in training who are likely to see these patients need sessions on the pragmatic aspects of diagnosis and clinical care; thus sessions were designed to provide a stimulating discussion of these issues, while delving into unsolved questions. The final major goal of this conference is to begin to grow the community of physicians who feel competent to see patients with primary immune deficiency. We believe that this is the only way to consolidate and build up a community of physicians and scientists who are working in this area. This Annual Meeting is sure to foster enthusiasm and provide advanced training for physicians and researchers working in the field of primary immune deficiency.

The CIS leadership is excited about the 2015 Annual Meeting and we look forward to bringing accomplished clinical researchers together to present what is sure to be outstanding science. We hope you enjoy the meeting!

Donald B. Kohn

Donald B. Kohn, MD University of California, Los Angeles 2015 Program Committee Co-Chair

## Immunology Society

N. Inaylo

Luigi D. Notarangelo, MD, PhD Children's Hospital Boston Harvard Medical School 2015 Program Committee Co-Chair

## Submit a Manuscript

The *Journal of Clinical Immunology* accepts manuscripts in the areas of human, basic, and clinical immunology and molecular biology. The areas of basic immunology include (but are not limited to) studies of lymphocytes, antigen presenting cells, neutrophils, natural killer cells, complement components, immunoglobulins, antibodies, cytokines and their receptors, immunoregulation, signal transduction, T–cell receptors, and immunoglobulin genes. Papers on animal models of human diseases are welcome. Articles dealing with molecular biology related to human diseases are accepted. Special Articles are by invitation only. Case reports will only be considered if they are linked to novel new findings/science or are accompanied by an extensive review of the relevant medical literature to the findings of the case report.

Authors, editors and reviewers of *Journal of Clinical Immunology* use our fully web-enabled online manuscript submission and review system. To keep the review time as short as possible, we request authors to submit manuscripts online to the journal's editorial office. Our online manuscript submission and review system offers authors the option to track the progress of the review process of manuscripts in real time.

## About the Journal

The Journal of Clinical Immunology is a bimonthly international journal that helps researchers and academic clinicians keep current on investigative basic immunology and diseases related to the immune system. This well-established journal publishes articles on basic, translational, and clinical studies in all aspects of immunology, including animal models of human diseases. The OnlineFirst™ feature



allows articles to be viewed through the journal's website before they are available in the printed journal. The *Journal of Clinical Immunology* is the official journal of the Clinical Immunology Society.

#### To submit a manuscript, please visit http://www.editorialmanager.com/joci/

#### Editor-in-Chief: Vincent R. Bonagura The Feinstein Institute for Medical Research

Hofstra North Shore-LIJ School of Medicine *Manhasset, NY, USA* 

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## **GENERAL MEETING INFORMATION**

#### MEETING LOCATION

All educational sessions, posters, exhibits, and registration held as part of the CIS Annual Meeting will take place at the Hilton Americas.

#### **Hilton Americas**

1600 Lamar Street, Houston, TX 77010 P: (713) 739-8000

#### **Registration Desk**

Hilton Americas ~ 2nd Floor, Ballroom of the Americas Foyer

#### **Registration Desk Hours**

Wednesday, April 8	4:00pm – 7:00pm
Thursday, April 9	7:00am – 8:00pm
Friday, April 10	7:00am – 6:30pm
Saturday, April 11	7:30am – 7:00pm
Sunday, April 12	7:00am - 10:00am

#### **EXHIBIT HALL**

Hilton Americas ~ 2nd Floor, Ballroom of the Americas A-C

Exhibitors provide the latest information on products and services available to physicians, researchers and allied health professionals in the field of immunology. Take this valuable opportunity to meet with companies and organizations specializing in all areas of the immunology field.

#### **Exhibit Hours**

Thursday April 9th 11:30am – 1:30pm 5:30pm – 6:30pm

Friday April 10th 11:30am – 1:00pm

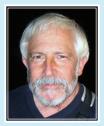
Saturday April 11th 12:00pm – 1:30pm

### **IN MEMORIAM**



#### JOHN FAHEY, MD, MS

*Co-Founder of CIS and pioneer in immunology and HIV research* 1924-2014



RICHARD SCHIFF, MD, PHD Dedicated child immunologist 1946-2014

#### **POSTER SESSIONS**

Poster sessions are held in the exhibit hall and authors will be present with their posters during exhibit hall hours. Lunch will be available during the afternoon poster session hours.

#### PUBLISHING OF ABSTRACTS

The abstracts submitted to the 2015 Annual Meeting are published in the April issue of Journal of Clinical Immunology, the official journal of the Clinical Immunology Society. Copies are available at the CIS registration desk.

#### ACCESSIBILITY

If you require special arrangements in order to fully participate in the CIS Annual Meeting, please speak with a CIS staff member at the registration desk.

#### NAME BADGES

All registered attendees at the CIS Annual Meeting will receive a name badge as part of their registration packet. These badges should be worn at all times as they will be used to control access to sessions and activities.

#### **SMOKING**

Smoking is prohibited at all CIS Annual Meeting sessions and events.

#### **EVALUATIONS**

Delegates will have the opportunity to provide feedback on their experience at the 2015 CIS Annual Meeting. After the meeting all registered delegates will receive an online evaluation to complete. Evaluations are an important part in helping us to improve our educational sessions so please take a moment to complete them!

This year a limited number of Fellows were selected receive travel grants. The following fellows traveling to Houston are being awarded travel grants:

Alice Chan, MD, PhD – University of California, San Francisco Jasmeen Dara, MD – Montefiore Medical Center Svjetlana Dolovcak, MD – University of Iowa Hospitals and Clinics Cullen Dutmer, MD – National Jewish Health Bob Geng, MD – Unversity of California, Los Angeles Medical Center Alexei Gonzalez-Estrada, MD – Respiratory Institute Cleveland Clinic Bruce Lanser, MD – National Jewish Health Lahari Rampur, MD – Montefiore Medical Center Jennifer Toh, MD – Montefiore Medical Center Kelli Williams, MD, MPH – NIAID, NIH Karl Yu, MD, PhD – Comer Children's Hospital/University of Chicago

Travel Grants made possible through the support of the

#### **IMMUNE DEFICIENCY FOUNDATION**

## **CONTINUING MEDICAL EDUCATION INFORMATION**

#### **PURPOSE**

Provide an opportunity for physicians to receive updated information and solidify their knowledge of primary immune deficiency.

#### **CONTENT AREA**

The content will cover practical, cutting edge and theoretical issues related to patient care. The majority of immune deficiencies will be covered to provide the maximal educational experience.

#### TARGET AUDIENCE

Physicians, scientists and nurses who are involved in the evaluation and/or care of patients with primary immune deficiencies. Participants should be pediatricians, internists, or scientists committed to the clinical management of patients with primary immunodeficiency diseases. These candidates may have backgrounds in immunology, adult medicine, rheumatology, hematology, laboratory immunology, or allergy/immunology.

#### **EXPECTED RESULTS**

At the completion of the activity participants should be able to:

- Recognize the value of new research techniques;
- · Describe new research findings in immunology;
- Explain the diagnosis and management of diseases and disorders across various subspecialties of medicine.

#### ACCME ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the sponsorship of the Clinical Immunology Society (CIS). The CIS is accredited by the ACCME to provide continuing medical education for physicians.

#### **DESIGNATION STATEMENT**

The Clinical Immunology Society designates this live activity for a maximum of 19 AMA PRA Category 1 Credit(s)<sup>m</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **CLAIMING CME**

To claim CME credit and print out your CME certificate and/or certificate of attendance, please visit www.clinimmsoc.org/cme/am15

## **DISCLOSURES OF CONFLICT OF INTEREST**

#### 2015 ANNUAL MEETING PROGRAM COMMITTEE AND SPEAKER DISCLOSURES

The Clinical Immunology Society (CIS) require instructors, planners, managers and other individuals who are in a position to control the content of this activity to disclose any real or apparent conflict of interest (COI) they may have as related to the content of this activity. All identified COI are thoroughly vetted and resolved. The existence or absence of COI for everyone in a position to control content appears below.

#### Roshini Sarah Abraham, PhD

MAYO CLINIC There are no relationships to disclose.

#### Arne Akbar, PhD

UNIVERSITY COLLEGE LONDON GSK – Consultant receiving Consultant fee Ono Pharmaceuticals Ltd – Consultant receiving Consultant fee

Blanche P. Alter, MD, MPH NATIONAL CANCER INSTITUTE There are no relationships to disclose.

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Jean-Laurent Casanova, MD, PhD THE ROCKEFELLER UNIVERSITY Biogen Idec – Principal investigator receiving Grant Genentech – Consultant receiving Consultant fee Merck – Principal investigator receiving Grant Novartis – Consultant receiving Consultant fee Pfizer – Consultant receiving Consultant fee Sanofi – Consultant receiving Consultant fee

Alice Y. Chan, MD, PhD UNIVERSITY OF CALIFORNIA, SAN FRANCISCO There are no relationships to disclose.

Michael Ciancanelli, PhD THE ROCKEFELLER UNIVERSITY There are no relationships to disclose.

Marco Colonna, MD WASHINGTON UNIVERSITY There are no relationships to disclose.

Megan A. Cooper, MD, PhD WASHINGTON UNIVERSITY SCHOOL OF MEDICINE There are no relationships to disclose.

#### Morton J. Cowan, MD

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Charlotte Cunningham-Rundles, MD, PhD MT. SINIAL MEDICAL CENTER ADMA Biologics – Supported Clinical Trials Baxter – Member on Advisory Committee received Consultant fee Kedrion – Member on Advisory Committee received Consultant fee Novartis – Advisor not receiving anything Regeneron – Consultant not receiving anything

Mark Davis, PhD STANFORD UNIVERSITY There are no relationships to disclose.

Maite De La Morena, MD UNIVERSITY OF TEXAS SOUTHWESTERN Atlantic Research Group — Member on KB052 Data Safety Monitory Board receiving Consultant fee

**Carol Ann Demaret** There are no relationships to disclose.

**Cullen Dutmer, MD** NATIONAL JEWISH HEALTH, UNIVERSITY OF COLORADO There are no relationships to disclose.

**Christopher Dvorak, MD** UNIVERSITY OF CALIFORNIA, SAN FRANCISCO Jazz Pharmaceuticals – Membership on advisory committee receiving Honoraria

**Lisa Filipovich, MD** CINCINNATI CHILDREN'S HOSPITAL There are no relationships to disclose.

Thomas A. Fleisher, MD NIH CLINICAL CENTER Association of Medical Laboratory Immunologists – Speaker receiving Honorarium Elsevier – Co-editor of Clinical Immunology: Principles and Practice receiving Book royalty Texas Allergy, Asthma and Immunology Society – Speaker receiving Honorarium **Alexandra Freeman, MD** NIAID, NIH There are no relationships to disclose.

**Eleonora Gambineri, MD** UNIVERSITY OF FLORENCE There are no relationships to disclose.

Raphaela Goldbach-Mansky, MD NIAMS, NIH Lilly – Receiving study support Novartis – Receiving study support Regeneron – Receiving study support SOBI – Receiving study support

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**Imelda Celine Hanson, MD** BAYLOR COLLEGE OF MEDICINE There are no relationships to disclose.

Helen Heslop, MD BAYLOR COLLEGE OF MEDICINE Celgene – Collaborator in research grant receiving Research support Cell Medica – Licensing agreement Viracyte – Founder with ownership interest

**Steven M. Holland, MD** NIAID, NIH There are no relationships to disclose.

**Peter Hotez, MD, PhD** BAYLOR COLLEGE OF MEDICINE There are no relationships to disclose.

**Elena Hsieh, MD** STANFORD UNIVERSITY Fluidigm — Speaking and Teaching receiving Speaker fee

Katharine Hsu, MD, PhD MEMORIAL SLOAN-KETTERING CANCER CENTER There are no relationships to disclose.

## **DISCLOSURES OF CONFLICT OF INTEREST**

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**Michael Lenardo, MD** NIAID, NIH There are no relationships to disclose.

**Rebecca Marsh, MD** CINCINNATI CHILDREN'S HOSPITAL MEDICAL CENTER There are no relationships to disclose.

**Leonid Metelitsa, MD** TEXAS CHILDREN'S CANCER CENTER There are no relationships to disclose.

Maurizio Miano, MD G. GASLINI RESEARCH INSTITUTE There are no relationships to disclose. Niki Moutsopoulos, MD

NAITONAL INSTITUTE OF DENTAL AND CRANIOFACIAL RESEARCH, NIH There are no relationships to disclose.

Luigi D. Notarangelo, MD BOSTON CHILDREN'S HOSPITAL, HARVARD MEDICAL SCHOOL There are no relationships to disclose.

Jordan S. Orange, MD, PhD BAYLOR COLLEGE OF MEDICINE ADMA Biologics – Consultant receiving Consultant fee ASD Healthcare – Consultant receiving Consultant fee Baxter Healthcare – Consultant receiving Consultant fee; Speaker receiving Speaker fee CSL Behring – Consultant receiving Consultant fee; Speaker receiving Speaker fee; Investigator receiving Research grant Walgreens – Consultant receiving Consultant fee

M. Virginia Pascual, MD BAYLOR INSTITUTE FOR IMMUNOLOGY RESEARCH Neovacs – Consultant receiving Consultant fee Novartis – Inventor receiving IP rights

Silke Paust, PhD TEXAS CHILDREN'S HOSPITAL There are no relationships to disclose.

**Elaine Piaggio, PhD** INSERM There are no relationships to disclose.

Isabella Quinti, MD, PhD SAPIENZA UNIVERSITY OF ROME Baxter – Member on advisory committee receiving Consulting fee

Antoni Ribas, MD UNIVERSITY OF CALIFORNIA, LOS ANGELES Amgen – Consulting receiving Consultant fee Genentech – Consulting receiving Consultant fee GSK – Consulting receiving Consultant fee Merck – Consulting receiving Consultant fee Kite Pharma – SAB Membership receiving Stock holder Compugen – SAB Membership receiving Stock holder **Sergio D. Rosenzweig, MD, PhD** NIAID, NIH There are no relationships to disclose.

John M. Routes, MD MEDICAL COLLEGE OF WISCONSIN There are no relationships to disclose.

**Mikko Seppänen, MD, PhD** HELSINKI UNIVERSITY CENTRAL HOSPITAL Baxter, Finland – Consulting receiving Consultant fee Meridian HealthComms, UK – Speaking and

teaching receiving Speaker Fee Octaphama, Finland – Speaking and teaching receiving Chair & Organizer fee

Ralph Shapiro, MD MIDWEST IMMUNOLOGY CLINIC Baxter – Principal investigator receiving Investigator fee Biocrys – Principal investigator receiving Investigator fee Shire – Speaker receiving Honoraria

**William T. Shearer, MD, PhD, FAAAAI** BAYLOR COLLEGE OF MEDICINE There are no relationships to disclose.

Kathleen Sullivan, MD, PhD CHILDREN'S HOSPITAL OF PHILADELPHIA Baxter – Primary investigator receiving Grant Immune Deficiency Foundation – Primary investigator receiving Grant; Consulting immunologist receiving Consultant fee

Troy R. Torgerson, MD, PhD

UNIVERSITY OF WASHINGTON aTyr Pharma – Consultant Baxter – Consultant, Speaking, and a Member on Advisory Committee receiving Research grant CSL Behring – Consultant receiving Research grant Infant Bacterial Therapeutics – Consultant QuestCor – Consultant

## **HOUSTON VISITOR INFORMATION**

#### THINGS TO DO:

The Hilton Americas is located in the heart of downtown Houston near local attractions and premier dining options.

#### **Discovery Green Park**

A 12-acre park in the heart of Houston that hosts concerts, movies, fitness classes & so much more.

#### **Houston Zoo**

Founded in 1922 & home to more than 6,000 exotic animals the Zoo lets you travel to Africa & back in a day.

#### **Houston Astros**

Home of the Houston Astros, Minute Maid Park combines classic old-time park with modern amenities. The park opened in 2000, and recent additions include the Chik-Fil-A cows on the foul poles asking fans to "EAT MOR FOWL".

#### **Theatre District**

The Houston Theater District is a 17-block area of downtown that ranks second in the US for number of seats in a concentrated downtown area. Catch a Broadway show, opera, symphony orchestra, or concert! The options are endless.

#### **Downtown Aquarium**

Dive into a unique experience at the Downtown Aquarium which turned two Houston landmarks – Fire Station No. 1 and the Central Waterworks Building – into an aquarium and restaurant. Over 200 species of aquatic animals live in the 5 different themed areas.

#### Houston Texans/Houston Live Stock Show & Rodeo

Stop over at the NRG Stadium to see the home of a variety of sporting events. This stadium is used for the Houston Texans, the Houston Live Stock Show & Rodeo, the Texas Bowl, & international USA Soccer matches.

#### **The Health Museum**

Release your inner child and check out the most visited health museum in the country. Ride a bicycle with a skeleton, sit on giant teeth, or measure your voice in the scream booth!

#### **Space Center Houston**

Houston has been nicknamed "Space City" because it is the home to America's astronaut corps where they and many international astronauts train. Test your hands at landing a shuttle (in a simulator, of course) and see what it's like to live in space at the visitor's center at NASA's Johnson Space Center.

#### **The Bayou Place**

This downtown dining and entertainment destination is experiencing a renaissance. Drink and dine while you catch a flick at Sundance Cinemas. There's not a bad seat in the house at The Bayou Music Center which is also home to the Houston Roller Derby. Go for a classic favorite at the Hard Rock Café. All of these dining-entertainment hot spots are at The Bayou Place.

#### Wildcat Golf Club

Houston Texans DE and NFL Defensive Player of the Year, J.J. Watt, and Heisman Trophy Winner, Johnny Manziel, have one thing in common — they both golf at Houston's best public course. Schedule a tee time for either of the two spectacular courses which feature elevations up to 100 feet providing spectacular views of Houston's downtown skyline.

#### PLACES TO DINE:

**The Grove** (0.0 miles) P: (713) 337-7322 Modern American Open for lunch and dinner A modern and elegant urban dining experience located on the South End of Houston's Discovery Green at this definitive see-and-be-seen culinary hotspot.

#### III Forks Prime Steakhouse (0.4 miles)

P: (713) 658-9457 Steakhouse Open for lunch and dinner A lively bar and lounge area with menu items featuring hand-selected USDA prime beef, ocean-fresh seafood, as well as lighter, local favorites.

#### Massa's Seafood Grill (0.2 miles)

P: (713) 655-9100 Seafood Open for lunch and dinner With superior seafood and pasta and a fine wine list, this seafood grill is sure to make the meal a memorable occasion.

#### Mia Bella Trattoria (0.4 miles)

P: (832) 319-6675 Italian Open for lunch and dinner

Like the traditional trattorias where Italian families gathered for wine and delicious food, this restaurant offers a delightful combination of Italian tradition and regional American twists.

#### MKT Bar (0.2 miles)

P: (832) 360-2222 Tapas Open for lunch and dinner Wine and beer bar offering small bites and an urban, yet relaxed setting to unwind after a long day.

#### Tony's Barbecue & Steakhouse (0.6 miles)

P: (713) 655-0033 American

Open for lunch and dinner

Laid-back eatery dishing smoked meats, steak dinners & sides plus madefrom-scratch desserts.

## **SCHEDULE AT A GLANCE**

	Ballroom of the Americas Foyer	Ballroom of the Americas A-C	Ballroom of the Americas D&E	Ballroom of the Americas A	Meeting Room 340	Meeting Room 344	Meeting Room 346
Wednesday, April							
4:00 pm- 8:00pm		Exhibit Hall Set-up/ Exhibitor Move in					
4:00pm - 7:00pm						Speaker Ready Room	
4:00pm - 7:00pm	Registration Open						
5:00pm - 7:00pm							CIS Council Meeting
Thursday, April 9		' 		'	'		
7:00am - 11:30am		Exhibitor Move-in					
7:30am - 7:30pm						Speaker Ready Room	
7:00am - 8:00pm	Registration Open						
7:00am - 8:00am	Breakfast						
8:00am - 5:30pm			Update in PID				
11:50am - 1:30pm		Exhibit Hall Open					
11:50am - 12:30pm		Update in PID Guided Poster Session					
12:30pm - 1:30pm		Exhibit / Poster Hall Open		Lunch			
5:30pm - 6:30pm		Welcome Reception / Exhibit Hall Open					
6:30pm - 7:15pm		· · · ·	Welcome & Robert A. Good Lecture				
7:30pm - 9:00pm				The Scientific Approach to the Patient Experience in Primary Immunodeficiency			
Friday, April 12	1				1		
7:30am - 7:00pm						Speaker Ready Room	
7:00am - 8:00am	Breakfast						
7:00am - 6:30pm	Registration Open						
7:30am - 8:00am		Guided Poster Session					
8:00am - 10:00am			Cancer Immunotherapy				
10:00am - 10:30am	Morning Break						
10:30am - 11:30am			Tales from the Listserv				
11:30am - 1:00pm		Exhibit / Poster Hall Open		Lunch			
1:00pm - 3:00pm			Auto-Immunity				
3:00pm - 3:30pm	Afternoon Break						
3:30pm - 5:00pm			Cytokines		Telomerase Defects		
5:00pm - 5:15pm	Late Afternoon Break						

## **SCHEDULE AT A GLANCE**

	Ballroom of the Americas Foyer	Ballroom of the Americas A-C	Ballroom of the Americas D&E	Ballroom of the Americas A	Meeting Room 340	Meeting Room 344	Meeting Room 346
Friday, April 12, co							
5:15pm - 6:15pm			The CIS Fahey/Rose Founders Lecture				
6:15pm - 8:00pm				Improving Health, Empowering Research USIDNET, the IDF ePHR and PI Connect Research Symposium			
Saturday, April 11							
7:30am - 5:45pm						Speaker Ready Room	
7:30am - 8:30am	Breakfast						
7:30am - 7:00pm	Registration Open						
8:00am - 9: 30am			Transplanting the Infected / Inflamed Patient		Innate Lymphoid Cells in Immune Homeostasis		
9:30am - 10:00am			CIS Business Meeting & Award Presentation				
10:00am - 10:30am	Morning Break	Guided Poster Session					
10:30am - 12:00pm			Vaccines!				
12:00pm - 1:30pm		Exhibit / Poster Hall Open		Lunch			
1:30pm - 3:00pm			Controversial and Challenges Diagnosing PI in the Office				
1:30pm - 5:00pm		Exhibit Hall Tear Down					
3:00pm - 3:30pm	Afternoon Break						
3:30pm - 5:30pm			Hot New Defects				
5:30pm - 5:45pm	Late Afternoon Break						
5:45pm - 6:30pm			Special Guest Appearance				
6:30pm - 8:00pm				CIS Closing Reception			
Sunday, April 12							
7:00am - 10:00am						Speaker Ready Room	
7:00am - 8:00am	Breakfast						
7:00am - 10:00am	Registration Open						
8:00am - 10:00am			PIDTC Session				

#### **THURSDAY, APRIL 9**

5:30pm – 6:30pm	Welcome Reception	Ballroom of the Americas A-C
6:30pm – 7:15pm	Welcome from CIS President	Ballroom of the Americas D&E
	Donald B. Kohn, MD, University of California, Los Angeles	
	Robert A. Good Lecture	
	.75 AMA PRA Category 1 Credit™	
	Toward a Genetic Theory of Childhood Infectious Diseeases Jean-Laurent Casanova, MD, PhD, The Rockefeller University	
7.20mm 0.00mm		Dollycom of the Americae A
7:30pm – 9:00pm	The Scientific Approach to the Patient Experience in Primary Immunodeficiency Dinner Symposia	Ballroom of the Americas A
	Supported by an educational grant from Baxter.	
	1.5 AMA PRA Category 1 Credits™	
	Moderator:	
	Troy Torgerson, MD, PhD, University of Washington	
	Speakers:	
	Charlotte Cunningham-Rundles, MD, PhD, Mt Sinai Medical Center	
	Jordan S. Orange, MD, PhD, Baylor College of Medicine	
	Quality of Life in Patients with Primary Antibody Deficiencies	
	Isabella Quinti, MD, PhD, Sapienza University of Rome	
FRIDAY, APRIL 10		
7:00am – 8:00am	Breakfast	Ballroom of the Americas Foyer
7:30am – 8:00am	Guided Poster Session	Ballroom of the Americas A-C
	Moderator:	
	Roshini Sarah Abraham, PhD, Mayo Clinic	
	Group 1	
	STEM CELL TRANSPLANTATION AND LONG-TERM SURVIVAL FOR PRIMARY IMMUNODEFICIENCIES:	
	OUTCOMES AMONG THE DONOR SOURCES AND DIFFERENT DIAGNOSTIC GROUPS	
	Caridad Martinez, MD, Baylor College of Medicine	
	RESULTS OF A PHASE III TRIAL IN PATIENTS WITH PIDD USING AN IVIG CONTAINING HIGH TITER NEUTRALIZING ANTIBODY TO RESPIRATORY SYNCYTIAL VIRUS (RSV)	
	James Mond, MD, PhD, ADMA Biologics	

DEEP SEQUENCING OF THE IGH LOCUS IN COMMON VARIABLE IMMUNE DEFICIENCY REVEALS GLOBAL ALTERATIONS IN CENTRAL AND PERIPHERAL B CELL DEVELOPMENT

Noa Simchoni, MD, Icahn School of Medicine at Mount Sinai

RUXOLITINIB EFFECTS ON STAT1 GAIN OF FUNCTION MUTATIONS

#### Ofer Zimmerman, MD, NIAID

Moderator:

Caroline Kuo, MD, University of California, Los Angeles

#### Group 2

TARGETED GENE THERAPY IN THE TREATMENT OF X-LINKED HYPER-IgM SYNDROME **Caroline Kuo**, **MD**, *University of California*, *Los Angeles* HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS CAUSED BY XIAP DEFICIENCY IN A FEMALE PATIENT WITH HETEROZYGOUS BIRC4 MUTATION AND SEVERE X CHROMOSOME SKEWING **Kejian Zhang**, **MD**, **MBA**, *Cincinnati Children's Hospital Medical Center* RECURRENT MYCOBACTERIUM INFECTIONS WITH CD4 LYMPHOPENIA : A MISSED CASE OF NEMO DEFICIENCY

Erinn Samantha Kellner, MD, University of South Florida

#### FRIDAY, APRIL 10, CONTINUED

	EXOME SEQUENCING UNCOVERS A HETEROZYGOUS STAT4 MUTATION IN A FAMILY WITH SUSCEPTIBILITY TO PACAROCCIDIOIDOMYCOSIS	
	Lena F. Schimke, MD, University of Sao Paulo – Institute of Biomedical Sciences	
	FUNCTION, PHENOTYPE AND STATS PROTEIN ACTIVATION IN CD56dim NK CELLS FROM PATIENTS WITH STAT1 GOF MUTATIONS	
	Alexander Vargas-Hernandez, PhD, CINVESTAV-IPN	
8:00am – 10:00am	Plenary Session: Cancer Immunotherapy	Ballroom of the Americas D&E
	2 AMA PRA Category 1 Credits™	
	Moderator: Steven M. Holland, MD, NIAID, NIH	
	Speakers:	
8:00am – 8:30am	Immunotherapy with Antigen Specific T Cells Helen Heslop, MD, Baylor College of Medicine	
8:30am – 9:00am	Natural Killer Cell Effects Against Cancer	
	Katharine C. Hsu, MD, PhD, Memorial Sloan Kettering Cancer Center	
9:00am – 9:30am	Treating Cancer with PD-1 Blockade	
	Antoni Ribas, MD, UCLA Oral Abstract:	
0.20.000 0.40.000		
9:30am — 9:40am	ALEMTUZUMAB, FLUDARABINE, AND MELPHALAN REDUCED INTENSITY CONDITIONING REGIMENS ARE SAFE FOR PATIENTS WITH XIAP DEFICIENCY	
	<b>Rebecca Marsh, MD,</b> <i>Cincinnati Children's Hospital Medical Center</i>	
10:00am – 10:30am	Morning Break	Ballroom of the Americas Foyer
10:30am — 11:30am	Tales from the Listserv	Ballroom of the Americas D&E
	1 AMA PRA Category 1 Credit™	
	Moderator:	
	Mikko Seppänen, MD, PhD, Helsinki University Central Hospital	
10.20.00 10.45.000	Speakers:	
10:30am — 10:45am	Mystery Case #1 David Buchbinder, MD, MS, Children's Hospital of Orange County	
10:45am – 11:00am		
10.454m 11.004m	Megan Cooper, MD, PhD, Washington University	
11:00am — 11:30am	Mystery Case #3	
	Roshini Sarah Abraham, PhD, Mayo Clinic	
	Michael B. Jordan, MD, Cincinnati Children's Hospital Medical Center	
11:30am – 1:00pm	Lunch / Poster Viewing / Exhibit Hall Open	Ballroom of the Americas A-C
1:00pm – 3:00pm	Plenary Session: Auto-Immunity	Ballroom of the Americas D&E
	2 AMA PRA Category 1 Credit™	
	Moderator: Elena Hsieh, MD, Stanford University	
	Speakers:	
1:00pm – 1:30pm	•	
	Molecular Mechanisms of IFIH1 and Inflammation	
. 1	Sun Hur, PhD, Harvard Medical School, Boston Children's Hospital	
2:00pm – 2:30pm	New Mechanisms in Autoinflammation: Interferon-Mediated Autoinflammatory Diseases Raphaela Goldbach-Mansky, MD, NIAMS, NIH	

#### FRIDAY, APRIL 10, CONTINUED

	Oral Abstracts: SEVERE AUTOIMMUNE SYNDROME MEDIATED BY NOVEL MUTATIONS OF ZAP70 Alice Y. Chan, MD, PhD, University of California, San Francisco MYCHOPHENOLATE MOFETIL AND SIROLIMUS AS SECOND OR FURTHER LINE TREATMENT IN	
	CHILDREN WITH CHRONIC REFRACTORY IDIOPATHIC OR SECONDARY AUTOIMMUNE CYTOPENIAS (AC): A SINGLE CENTER EXPERIENCE <b>Maurizio Miano, MD,</b> <i>G. Gaslini Research Institute</i>	
3:00pm – 3:30pm	Afternoon Break	Ballroom of Americas Foyer
3:30pm – 5:00pm	Concurrent Workshops	
	Session 1: Telomerase Defects 1.5 AMA PRA Category 1 Credits™ Moderator: John Routes, MD, Medical College of Wisconsin	Meeting Room 340
3:30pm – 4:00pm	Speakers: Inflammatory, Senescence and Nutritional Signals Regulate Telomerase in T Cells <b>Arne Akbar, PhD</b> , University College London	
4:00pm – 4:30pm	Dyskeratosis Congenita, A Cancer-Prone Syndrome Blanche P. Alter, MD, MPH, National Cancer Institute, Division of Cancer Epidemiology & Genetics, Clinical Genetics Branch	
4:30pm – 5:00pm	Dyskeratosis Congenita, A Disorder of Telomere Maintenance Alison Bertuch, MD, PhD, Baylor College of Medicine	
	Session 2: Cytokines 1.5 AMA PRA Category 1 Credits™ Moderator:	Ballroom of Americas D&E
	Luigi Notarangelo, MD, Boston Children's Hospital, Harvard Medical School	
3:30pm – 4:00pm	Speakers: Interleukin 2 Therapy for Wiskott-Aldrich Syndrome Soma Jyonouchi, MD, Children's Hospital of Philadelphia	
4:00pm – 4:30pm	Dysregulation of the IL-17 Axis in LAD-1; Mechanisms and Potential for Therapeutic Intervention <b>Niki Moutsopoulos, DDS, PhD,</b> <i>National Institute of Dental and Craniofacial Research, NIH</i>	
4:30pm – 5:00pm	Variations on Low-Dose IL-2-Based Therapies Eliane Piaggio, PhD, Inserm	
5:00pm – 5:15pm	Late Afternoon Break	Ballroom of Americas Foyer
5:15pm – 6:15pm	<b>The CIS Fahey/Rose Founders Lecture</b> 1 AMA PRA Category 1 Credits™ Moderator:	Ballroom of Americas D&E
	Jordan Orange, MD, PhD, Baylor College of Medicine	
	Speaker: Nature, Nurture, and Infection in the Human Immune System Mark Davis, PhD, Stanford University	
6:15pm – 8:00pm	Improving Health, Empowering Research USIDNET, the IDF ePHR and PI Connect Reception Symposium	Ballroom of Americas A
	Charlotte Cunningham-Rundles, MD, PhD, Mt. Sinai Medical Center Marcia Boyle, President & Founder, Immune Deficiency Foundation Christopher Scalchunes, Director of Research, Immune Deficiency Foundation Kathl;een Sullivan, MD, PhD, Children's Hospital of Philadelphia	

#### SATURDAY, APRIL 11

7:30am –8:30am	Breakfast	Ballroom of Americas Foyer
8:00am –9:30am	Concurrent Workshop Sessions	,
	Session 1: Innate Lymphoid Cells in Immune Homeostasis 1.5 AMA PRA Category 1 Credits™ Moderator: Elena Hsieh, MD, Stanford University	Meeting Room 340
8:00am – 8:30am	Speakers: Innate Immunity and Dementias <b>Marco Colonna, MD,</b> Washington University School of Medicine	
8:30am – 9:00am	Natural Killer Cell-Mediated Immunological Memory Silke Paust, PhD, Baylor College of Medicine	
9:00am — 9:30am	Invariant Natural Killer T Cells in Tumor Immunity Leonid Metelista, MD, PhD, Texas Children's Cancer Center	
	Session 2: Transplanting the Infected/Inflamed Patient 1.5 AMA PRA Category 1 Credits™ Moderator: Donald B. Kohn, MD, University of California, Los Angeles	Ballroom of Americas D&E
8:00am – 8:30am	Speakers: Thrombotic Microangiopathy: A Major Complication of Bone Marrow Transplantation Lisa Filipovich, MD, Cincinnati Children's Hospital Medical Center	
8:30am — 9:00am	DOCK8 Deficiency: Approach to Translation Alexandra Freeman, MD, NIAID, NIH	
9:00am — 9:30am	Hematopoietic Stem Cell Transplantation in Patients with Phagocyte Disorders <b>Tayfun Güngör, MD,</b> University of Zurich	
9:30am — 10:00am	CIS Business Meeting & Award Presentation	Ballroom of Americas D&E
10:00am — 10:30am	Morning Break & Guided Poster Sessions	Ballroom of Americas A-C
	Moderator: Roshini Sarah Abraham, PhD, Mayo Clinic Group 1	
	NK CELL PHENOTYPIC VARIABILITY IN THE NORMAL ADULT POPULATION	
	Laura S. Angelo, PhD, Baylor College of Medicine	
	HUMAN ITCH DEFICIENCY COMPROMISES THE FUNCTION OF FOLLICULAR HELPER T CELLS Huie Jing, PhD, NIAID, NIH	
	AUTOSOMAL DOMINANT ECTODERMAL DYSPLASIA AND IMMUNODEFICIENCY IN A MOTHER AND DAUGHTER WITH A SEVERE ECTODERMAL DYSPLASIA AND A MILD IMMUNODEFICIENCY WITH IG DYSREGULATION DUE TO A HETEROZYGOUS NFKBIA MUTATION WITH TERMINATION AT TRP11 Jessie Lee, Royal Prince Alfred Hospital	
	LONGITUDINAL STUDY OF CVID ILD Paul J. Maglione, MD, PhD, Sinai School of Medicine	
	ROLE OF AIRE AND DECTIN RECEPTORS AT THE "FUNGAL SYNAPSE"; A PROPOSED REGULATION OF INNATE IMMUNE RESPONSE TO CANDIDA ALBICANS INFECTION	
	Jose Antonio Tavares de Albuquerque, University of Sao Paulo – Institute of Biomedical Sciences	

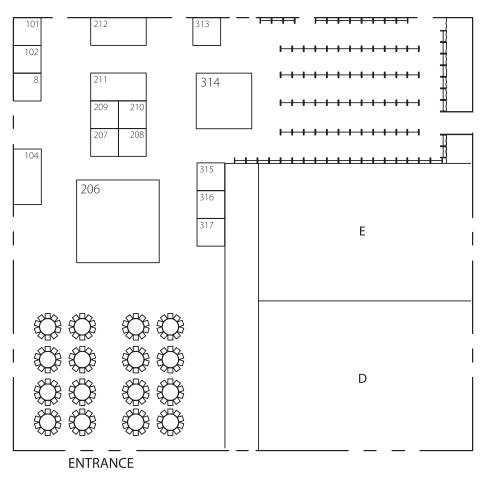
#### SATURDAY, APRIL 11, CONTINUED

, i i i i i i i i i i i i i i i i i i i	Moderator:	
	Caroline Kuo, MD, University of California, Los Angeles	
	Group 2	
	CLINICAL CHARACTERISTICS AND GENETIC PROFILES OF SEVERE COMBINED IMMUNODEFICIENCY: A SINGLE CENTER EXPERIENCE IN CHINA	
	Ying-Ying Jin, MD, Shanghai Jiao Tong University School of Medicine	
	COMPUTATIONAL ANALYSIS IDENTIFIES COMORBIDITY NETWORK CHARACTERIZING INFLAMMATORY BOWEL DISEASE IN COMMON VARIABLE IMMUNE DEFICIENCY	
	Mei-Sing Ong, PhD, Boston Children's Hospital	
	SUBCUTANEOUS IMMUNOGLOBULIN THERAPY IN PATIENTS WITH CHRONIC INFLAMMATORY DEMYELINATING POLYNEUROPATHY	
	Analía Gisela Seminario, MD, Ricardo Guitiérrez Children's Hospital	
	STAT 1 GAIN-OF-FUNCTION MUTATION IN PATIENT WITH VISCERAL LEISHMANIASIS AND SECONDARY HEMOPHAGOCYTIC LYMPHOHYSTIOCITOSIS	
	Paula Teixeira Lyra Marques, MD, Instituto de Medicina Integral Prof. Fernando Figueira	
	BURKHOLDERIA CEPACIA COMPLEX INFECTION ASSOCIATED WITH DEFECTS IN IL-12 SIGNALING Christa S. Zerbe, MD, NIAID, NIH	
10:30am – 12:00pm	Plenary Session: Vaccines!	Ballroom of Americas D&E
	1.5 AMA PRA Category 1 Credits™	
	Moderator: Sergio Rosenzweig, MD, PhD, NIAID, NIH	
10:30am — 11:00am	Speakers: NTDs, Blue Marble Health, & the Antipoverty Vaccines <b>Peter Hotez, MD, PhD,</b> Baylor College of Medicine, (Parasitic Diseases)	
11:00am — 11:30am	cAd3 Ebola Vaccine: Development and Phase I Clinical Trial Results	
	Julie Ledgerwood, DO, NIAID, NIH	
11:30am – 11:40am	Oral Abstract: VACCINE-STRAIN VARICELLA-ZOSTER VIRUS-INDUCED ILLNESS IN IMMUNODEFICIENT HOSTS RECEIVING IMMUNOSUPPRESSIVE THERAPY	
	Cullen M. Dutmer, MD, National Jewish Health, University of Colorado	
11:40am – 12:00pm	Panel Discussion	
12:00pm – 1:30pm	Lunch / Poster Viewing / Exhibit Hall Open	Ballroom of Americas A-C
1:30pm – 3:00pm	<b>Controversial and Challenges Diagnosing PI In the Office</b> 1.5 AMA PRA Category 1 Credits <sup>™</sup> Moderators:	Ballroom of Americas D&E
	Charlotte Cunningham-Rundles, MD, PhD, Mt Sinai Medical Center Kathleen Sullivan, MD, PhD, Children's Hospital of Philadelphia	
	Panel:	
	Zuhair Ballas, MD, University of Iowa	
	Maite De La Morena, MD, University of Texas Southwestern Imelda Celine Hanson, MD, Texas Children's Hospital	
	Ralph Shapiro, MD, Midwest Immunology Clinic	
	<b>Troy Torgerson, MD, PhD,</b> University of Washington	
3:00pm – 3:30pm	Afternoon Break	Ballroom of Americas Foyer
		,

#### SATURDAY, APRIL 11, CONTINUED

3:30pm – 5:30pm	Plenary Session: Hot New Defects 2 AMA PRA Category 1 Credits™ Moderator: Thomas Fleisher, MD, NIH	Ballroom of Americas D&E
3:30pm – 4:00pm	Speakers: Genetic Etiology of Life-Threatening Influenza <b>Michael Ciancanelli, PhD,</b> The Rockefeller University	
4:00pm – 4:30pm	Genome Alterations in Human Immune Genetic Disorders: Mechanisms and Treatment Michael Lenardo, MD, National Institute of Allergy and Infectious Diseases, National Institutes of Health	
4:30pm – 5:00pm	Novel Combined Immunodeficiencies <b>Emma Haapaniemi, MD,</b> University of Helsinki <b>Luigi Notarangelo, MD, PhD,</b> Boston Children's Hospital, Harvard Medical School Oral Abstracts:	
5:00pm – 5:10pm		
5:10pm – 5:20pm	NFKB2 MUTATION DISRUPTS CANONICAL AND NON-CANONICAL NF-ĸB SIGNALLING IN EARLY-ONSET COMMON VARIABLE IMMUNODEFICIENCY	
5:20pm – 5:30pm	Mohammad A. A. Ibrahim, MD, PhD, <i>King's College London</i> A NEW GENETIC DISORDER PREDISPOSE MENDELIAN SUSCEPTIBILITY TO MYCOBACTERIAL DISEASES Xiao-Fei Kong, MD, PhD, <i>The Rockefeller University</i>	
5:30pm – 5:45pm	Late Afternoon Break	Ballroom of Americas Foyer
5:45pm – 6:30pm	<b>The Story of David the Bubble Boy</b> .75 AMA PRA Category 1 Credit™ Moderator:	Ballroom of Americas D&E
	Thomas Fleisher, MD, NIH Speakers: Carol Ann Demaret	
	William T. Shearer, MD, PhD, Baylor College of Medicine, Texas Children's Hospital	
6:30pm – 8:00pm	CIS Closing Reception	Ballroom of Americas A
SUNDAY, APRIL 12		
7:00am – 8:00am	Breakfast	Ballroom of Americas Foyer
8:00am —10:00am	<b>PIDTC Session</b> 2 AMA PRA Category 1 Credits™ Moderator: <b>Mort Cowan, MD,</b> University of California, San Francisco	Ballroom of Americas D&E
8:00am — 8:30am	Speakers: PIDTC 6902: Retrospective Study of Severe Combined Immunodeficiency in North America Mort Cowan, MD, University of California, San Francisco	
8:30am – 9:00am	PIDTC 6901: The Modern State of SCID Diagnosis and Treatment Chris Dvorak, MD, University of California, San Francisco	
9:00am — 9:30am	PIDTC 6903: Transplantation for Chronic Granulomatous Disease Elizabeth Kang, MD, NIAID, NIH	
9:30am — 10:00 am	PIDTC 6904 Prospective and Retrospective WAS Study Luigi Notarangelo, MD, PhD, Boston Children's Hospital, Harvard Medical School	

## **EXHIBIT HALL FLOOR PLAN**



#### EXHIBITITOR LISTING

#### BOOTH #8

#### **KRONUS**, Inc.

For nearly 30 years, KRONUS® has provided specialized autoimmune test kits to medical professionals at the world's most respected laboratory facilities. Please take a few moments to visit our informative exhibit at booth number 8 and learn more about our complete line of specialized immunoassay test kits.

#### BOOTH #101

#### **Immune Deficiency Foundation**

The Immune Deficiency Foundation is the national patient organization dedicated to improving the diagnosis, treatment and quality of life of persons with primary immunodeficiency diseases through advocacy, education & research.

#### BOOTH #102

#### Healix Infusion Therapy Inc.

As the national leader in physician practice infusion management, Healix® offers convenient and customizable infusion therapy solutions for Allergy and Immunology practices nationwide. Our service offering in over 100 locations includes pharmaceutical dispensing, clinical staffing, inventory and revenue cycle management, and more to enhance your patient care and profitability. To learn more, visit us online at www.healix.net.

#### BOOTH #104

#### **CSL Behring**

CSL Behring is a leader in the plasma protein therapeutics industry. The company manufactures and markets plasma-derived and recombinant therapies worldwide. CSL Behring therapies are used around the world to treat coagulation disorders, primary immune deficiencies, hereditary angioedema and inherited respiratory disease, and neurological disorders in certain markets.

#### BOOTH #206

#### **Baxter Healthcare**

Baxter Healthcare Corporation, along with its subsidiaries, develops, manufactures and markets healthcare products that save and sustain the lives of people with hemophilia, immune disorders, infectious diseases, kidney disease, trauma, and other chronic and acute medical conditions. As a global, diversified healthcare company, Baxter applies a unique combination of expertise in medical devices, pharmaceuticals and biotechnology to create healthcare products that advance patient care worldwide.

Come visit Baxter's BioTherapeutics booth, where our specialists will be available to answer your questions about Baxter products and our commitment to the fields of immunology and neurology. For more information on Baxter's products and services, please visit www.baxter. com.

## **EXHIBITITORS**

#### BOOTH #207

#### **Biofusion Inc.**

Biofusion is a specialty provider of IgG therapy. Our unique service model includes pharmacy expertise that follows stringent protocols for review and monitoring of nurse/patient adherence to therapy. We possess a national network of infusion nurses specifically trained in IgG administration. Our streamlined care coordination includes reimbursement services and a comprehensive patient advocacy support program tailored to the individualized needs of IgG patients and their caregivers

#### BOOTH #208

#### AxelaCare

AxelaCare specializes in IVIG and other infusible medications. We provide medications, treatment management, insurance support, home infusion nursing and advocacy services for patients with rare and chronic diseases. Our mission is to empower people in the pursuit and delivery of exceptional patient care.

#### BOOTH #209

#### **National Jewish Health**

National Jewish Health Advanced Diagnostic Laboratories is a CAP, CLIA and CAP15189SM laboratory with decades of experience developing immunology, complement, infectious disease and molecular diagnostic tests. We provide unparalleled clinical expertise and diagnostic testing in immune deficiency, respiratory disease, allergy and autoimmunity. Through collaborations with our fellow physicians and laboratory scientists, we share our passion for science and develop new therapies and high quality laboratory tests that transform patient lives.

#### BOOTH #210

#### GeneDx

GeneDx is highly respected laboratory, specializing in genetic testing for inherited disorders. GeneDx offers sequencing and deletion/duplication testing for inherited cardiac disorders, mitochondrial disorders, neurological disorders, inherited cancer disorders, prenatal disorders and other rare genetic disorders. GeneDx also offers whole exome sequencing, nextgeneration and microarray-based testing.

#### BOOTH #211

#### **Baxter Healthcare – Medical Affairs**

The BioTherapeutics Medical Affairs booth will be staffed by Baxter Medical Affairs representatives who are able to answer medical and scientific questions about Baxter's immune globulin products. For more information on BioTherapeutics, please visit www.baxter.com

#### BOOTH #212

#### Grifols USA, LLC

Grifols is a global healthcare company whose mission is to improve the health and well-being of people around the world. We have three primary divisions – Bioscience, Diagnostic and Hospital – that develop, produce and market our innovative products and services to medical professionals in more than 100 countries around the world.

#### BOOTH #313

#### BioRx

BioRx is a national provider of specialty pharmacy, infusion management and industry consulting services. As a private, independently-owned company, BioRx is committed to a flexible service model that meets the needs of its customers, including consumers, healthcare providers, health plans and pharmaceutical manufacturers.

#### BOOTH #314

#### **Horizon Pharma**

Horizon Pharma plc is a specialty biopharmaceutical company focused on improving patients' lives by identifying, developing, acquiring and commercializing differentiated products that address unmet medical needs. The Company markets a portfolio of products in arthritis, inflammation and orphan diseases. Horizon's U.S. marketed products are ACTIMMUNE® (interferon gamma-1b), DUEXIS® (ibuprofen/famotidine), PENNSAID® (diclofenac sodium topical solution) 2% w/w, RAYOS® (prednisone) delayed-release tablets, and VIMOVO® (naproxen/esomeprazole magnesium).

#### BOOTH #315

#### Cincinnati Children's Hospital Medical Center

The Diagnostic Center for Heritable Immunodeficiencies (DCHI) at Cincinnati Children's is the largest and most specialized center in North America for the diagnosis of rare primary immunodeficiencies, bone marrow failure syndromes and other disorders of the immune system. The DCHI has been recognized as a center of excellence by the Federation of Clinical Immunology Societies and the Jeffrey Modell Foundation.

#### BOOTH #316

#### **Bio Products Laboratory USA, Inc.**

Bio Products Laboratory (BPL) is a global company with 60 years of history in plasma research, technology, and manufacturing. Originally part of the world-famous Lister Institute, BPL has a full line of products derived from plasma collected at 35 company-owned collection centers across the US. For more information please visit www.bpl-us.com.

#### BOOTH #317

#### Medical College of Wisconsin

The Clinical Immunodiagnostic & Research Laboratory (CIRL) at MCW offers diagnostic flow cytometry for Primary Immunodeficiency (PID) diseases. CIRL and CHW's PID Clinics function as Jeffrey Modell Diagnostic & Patient Referral Center in Wisconsin since 2007. IDC is first in USA to pioneer statewide newborn screening for Severe Combined Immunodeficiency.

Poster #	Title	Name	Affiliation
1	ACCURACY OF FLOW CYTOMETRIC PERFORIN SCREENING FOR DETECTION OF PATIENTS WITH FAMILIAL HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS DUE TO PRF1 MUTATIONS	Manar Abdalgani, MD	Cincinnati Children's Medical Center
2	THE NATIONAL INSTITUTE OF HEALTH (NIH) PRIMARY IMMUNE DEFICIENCY CLINIC (PID-C): DESCRIPTION AND 7 YEARS EXPERIENCE	Anahita Agharahimi, CRNP	National Institute of Allergy and Infectious Diseases/NIH
3	FUNNY IMMUNOLOGY TO SAVE LIVES	Juan Carlos Aldave, MD	Hospital Nacional Edgardo Rebagliati Martins
4	A 5 YEAR OLD GIRL WITH RECURRENT AND MULTIPLE INFECTIONS AND IMPERFECT OSTEOGENESIS WITH A RARE MUTATION ONLY ONCE PREVIOUSLY REPORTED IN HUMANS - LCK MISSENSE MUTATION	Guisela Adriana Alva Lozada, MD	Edgardo Rebagliati Martins National Hospital
5	MYELOID CELLS DIFFERENTIATED IN THE PRESENCE OF INTERFERON- GAMMA COMPARED TO MATURE CELLS EXPOSED TO THIS CYTOKINE EXHIBIT DIFFERENT PHOX PROTEIN EXPRESSION AND Nox2 ACTIVITY	Daniel R. Ambruso, MD	University of Colorado Denver
6	NK CELL PHENOTYPIC VARIABILITY IN THE NORMAL ADULT POPULATION	Laura S. Angelo, PhD	Texas Children's Hospital/Baylor College of Medicine
7	DEFECTS IN IFN-yRa AND IFN-yRB CAUSE DYSREGULATION IN GENE EXPRESSION OF NADPH OXIDASE SYSTEM COMPONENTS – EBV-B CELL MODEL	Walmir Cutrim Aragão-Filho, PhD, MSc	Department of Immunology ICB-USP, São Paulo, Brazil; Ciped-FCM, UNICAMP, Campinas, Brazil
8	PATIENTS WITH CARTILAGE-HAIR HYPOPLASIA DISPLAY TELOMERE LENGTH DEFICIENCY COMPARED TO RMRP MUTATION HETEROZYGOTES AND NORMAL CONTROLS.	Geraldine Aubert, PhD	BC Cancer Research Centre
9	A COMPARATIVE STUDY BETWEEN LYOTUBES AND LIQUID ANTIBODIES FOR CLINICAL FLOW CYTOMETRY	Pinaki P. Banerjee, PhD	Center for Human Immunobiology,Texas Children's Hospital
10	CHARACTERIZATION OF JUVENILE SLE PATIENTS WITH ACQUIRED ANGIOEDEMA	Diana K. Bayer, DO	University of Iowa Carver College of Medicine
11	DETECTION OF X LINKED CHRONIC GRANULOMATOUS DISEASE CARRIERS THROUGH FUNCTIONAL ASSAYS IN PERIPHERAL BLOOD	Lizbeth Blancas-Galicia, MD	Instituto Nacional de Pediatría
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#### Applications need to be submitted via the CIS website, www.clinimmsoc.org. Applications must be supported by a:

- Letter from the Training Program Director or Department Chair;
- Curriculum Vitae;
- Statement of how the School will be beneficial;
- Abstract of the case or research project. CIS is looking for a case report including those which can be presented as a mystery for discussion purposes but should have a final diagnosis. Alternatively, cases with diagnostic dilemmas which could be discussed are acceptable. In addition, completed research projects germane to the field of primary immune deficiency are also acceptable

Accepted abstracts will be provided with travel grants to assist with airfare, hotel, and meal expenses. The language of the School will be in English and selected participants are required to become CIS members at the conclusion of the School.

#### Target Audience:

- Fellows-in-training;
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Participants should be pediatricians, internists, or scientists committed to the clinical management of patients with primary immunodeficiency diseases. Candidates may have backgrounds in immunology, infectious diseases, adult medicine, rheumatology, hematology, laboratory immunology, stem cell transplantation, or allergy/immunology.

#### **Objectives:**

- Education on the diagnosis, pathogenesis, and treatment of PIDD;
- Attract and develop future scientists in academic medicine;
- Enhance awareness of clinical immunology and its importance in scientific discoveries and clinical applications;
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