

CIS 2018 Annual Meeting:

Immune Deficiency & Dysregulation North American Conference



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 800 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.

CIS NATIONAL OFFICE

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Join our Group on LinkedIn











National Office

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Dear Colleagues,

On behalf of the Clinical Immunology Society (CIS), thank you for participating in the 2018 Annual Meeting: Immune Deficiency & Dysregulation North American Conference taking place April 26-29, 2018 at the Sheraton Centre in Toronto, Ontario, Canada.

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 2018 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! Regards,

Roshini Sarah Abraham, PhD

Mayo Clinic

Rochester, MN

2018 Program Committee Co-Chair

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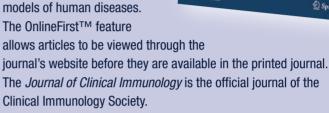
Submit a Manuscript

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.



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

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Journal of

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MEETING LOCATION

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

Sheraton Centre 23 Queen St W Toronto, Ontario M5H 2M9 Canada

Exhibit Hall

Sheraton Centre ~ Sheraton Hall and Osgoode Ballroom

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.

Exhibitor Move-In

Thursday, April 26

8:00am - 5:00pm

Exhibit Hours

Friday, April 27

11:30pm - 1:00pm

Saturday, April 28

12:00pm - 2:00pm & 5:30pm - 7:30pm

Exhibitor Move-Out

Saturday, April 28

7:30pm - 10:00pm

Sunday, April 29

7:00am - 11:00am

Poster Sessions

Poster sessions are held in the Sheraton Hall and Osgoode Ballroom. All presenting authors will be at their posters during the following days and times:

- Friday, April 27, 12:20pm 1:00pm
- Saturday, April 28, 1:20pm 2:00 pm

A listing of all posters, topics, and authors is available at the back of the program.

Publishing of Abstracts

The abstracts submitted to the 2018 Annual Meeting are published in the April issue of *Journal of Clinical Immunology*, the official journal of the Clinical Immunology Society. Copies are available on the CIS website.

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. By registering for the CIS Annual Meeting, you give consent to be photographed by CIS Staff for purposes of advertising and public display.

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 2018 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 it!

Listserv

CIS-PIDD LIST SERVICE & NIT-FIT LIST SERVICE

The CIS-PIDD listserv has been set up to provide an easy way for individuals to discuss cases and provide feedback to colleagues. The NIT-FIT listserv has been set up to provide fellows and junior faculty a dedicated place to discuss issues with each other; it is limited to Fellows-in-Training, Junior Faculty and a few select Senior Faculty members for mentor purposes. These Listservs are set up as a communication tool to help you interact with your colleagues. You do not have to be a member of CIS to participate on the listervs. To join, please apply on the CIS website, www.clinimmsoc.org.

REGISTRATION DESK

Sheraton Centre ~ Lower Concourse Foyer

Registration Desk Hours

Thursday, April 25

Thursday, April 26

Friday, April 27

Saturday, April 28

Sunday, April 29

7:00am - 7:00pm

7:00am - 7:00pm

7:00am - 7:00pm

7:00am - 8:30am



CONTINUING MEDICAL EDUCATION INFORMATION

Purpose

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

Content Area

The content will cover practical, cutting edge and theoretical issues related to patient care. The majority of the immunodeficiencies 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 immunodeficiencies. 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.

Learning Objectives

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 21 *AMA PRA Category 1 Credit(s)*™. 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: http://cis.clinimmsoc.org/cme/am18/.





DISCLOSURES OF CONFLICT OF INTEREST

2018 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.

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CSL Behring Canada (Both Myself and my Spouse/ Partner): Board Member/Advisory Panel (Status: Ongoing), Consultant/Advisory Board (Status: Ongoing), Other Research Support (Status:

Ongoing), Research Grant (Status: Ongoing), Speaker/Honoraria (Status: Ongoing);

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consulting fees; Speaker receiving speaker fees

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BAYLOR COLLEGE OF MEDICINE

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Immune Deficiency Foundation (Self): Grants received as principal investigator

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NCI, EMD Serono, MedImmune, Healios Oncology NutritionAmplimmune, ARMO BioSciences, Karyopharm Therapeutics, Incyte, Novartis, Regeneron, Atterocor, Merck, BMS (Spouse): Grants received as Principal Investigator

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Grifols (Self): Consultant/Advisory Board; LFB Biomedicaments (Self): Consultant/Advisory Board, Speaker/Honoraria;

Octapharma (Self): Speaker/Honoraria; Pfizer (Self): Speaker/Honoraria; Roche (Self): Speaker/Honoraria

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Shire (Self): Speaker/Honoraria (Status: Terminated — Sept 30, 2017)

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INSTITUT IMAGINE



TORONTO VISITOR INFORMATION

THINGS TO DO:

Air Canada Centre - Entertainment Complex

Showcases the finest in professional sports: Toronto Maple Leafs (NHL) and the Toronto Raptors (NBA), Concerts, Family Shows, Lacrosse, MMA, Boxing.

Art Gallery of Ontario

With a collection of more than 80,000 works of art, the Art Gallery of Ontario is among the most distinguished art museums in North America.

Canada's Walk of Fame

Canada's Walk of Fame is a national registered charity that celebrates Canadians who have excelled in their fields. 167 stars honouring remarkable Canadians have a permanent place of tribute in the streets of Toronto.

CN Tower

The CN Tower is an internationally renowned architectural triumph, an engineering Wonder of the Modern World, world-class entertainment and dining destination and a must see for anyone visiting Toronto. Spectacular views include floor-to-ceiling panoramic Window Walls, world-famous Glass Floor, SkyPod and glass fronted elevators with glass floor panels.

Distillery Historic District, The

Toronto's newest centre for arts, culture, food and entertainment. This national historic site includes 44 heritage buildings and numerous bricklined courtyards. Explore the district's many restaurants, art galleries, artisan boutiques, specialty retail stores and more.

Harbourfront Centre

Harbourfront Centre is an innovative, non-profit cultural organization which provides internationally renowned programming in the arts, culture, education and recreation, all within a collection of distinctive venues in the heart of Toronto's downtown waterfront

Redpath Sugar Museum

Museum displays and education programs centred upon the history of sugar, The Redpath Sugar Company, antique and modern refining technologies and nutrition/health.

Royal Ontario Museum

No trip to Toronto is complete without a visit to the Royal Ontario Museum --Canada's largest museum showcasing art, culture, and nature from around the globe and across the ages.

St. Lawrence Market Complex

In the centre of historic Old Town Toronto, close to the hub of today's downtown sits the St. Lawrence Market Complex - three buildings that have served as Toronto's social centre, City Hall and marketplace throughout the City's history.

PLACES TO EAT

At the Sheraton

Irish Steakhouse Ouinns Shopsy's Delicatessen BNB **Specialty Burgers**

Across the Street

Estiatorio Volos Mediterranean Seafood

Little Anthony's Italian Ruth's Chris Steakhouse

Less than 5 min walk

Carbon Bar Sharable/Pub Fare

The Gabardine Canadian Bannock Canadian Drake 150 Eclectic/Modern Hv's Steakhouse Nota Bene Restaurant Canadian

5-7 min walk

Richmond Station Canadian Canadian Earls Kitchen & Bar Steakhouse Copacabana Brazilian Cactus Club International

7-10 min walk

Canoe

Canadian Los Colibris Upscale Mexican El Caballito Taco and Teguila Bar

Town Crier European Bar Hard Rock Cafe Family Friendly

Matagali Indian Nami Sushi **Japanese** Ki **Japanese** Benihana Japanese Pai Thai

11-15 min walk

Canyon Creek Restaurant Steakhouse Buonaotte Italian Donatello Italian

Jump New York Style Bistro

Fine Dining Rosewater Shark Sports Club Sports Bar

Jack Astors Sports Bar/Family Friendly Pickle Barrel American/ Family Friendly

Aroma Indian Spring Sushi Japanese Biff's Bistro French Le Papillion French JOEY - Eaton Centre American

2018 CIS ANNUAL MEETING SCHEDULE AT-A-GLANCE

THURSDAY, APRIL	26	
7:50am – 2:00pm	Pre-conference: Update on Diagnostic Advances in PIDs	Grand East
2:30pm — 4:00pm	Opening Plenary: Grantee Fellowship Presentations and Notable Abstracts	Grand West and Centre
4:00pm — 6:00pm	Plenary Session: Patient Management Controversies in PIDs	Grand West and Centre
6:00pm – 7:00pm	Robert A. Good Lecture Genetic Immunodeficiencies and Bone Marrow Failure Akiko Shimamura, MD, PhD	Grand West and Centre
7:00pm — 9:00pm	USIDNET Reception	Grand East
FRIDAY, APRIL 27		
7:00am — 8:00am	Continental Breakfast	Lower Concourse
8:00am – 9:30am	Plenary Session: Cross-Talk: PIDs from the Perspectives of Other Specialties	Grand West and Centre
9:30am – 9:50am	Morning Break	Grand West and Centre
9:50am – 11:30am	Plenary Session: The Thymus: Understanding the Biology, Diseases, and Treatments	Grand West and Centre
11:30am — 1:00pm	Lunch / Exhibit Hall Open	Sheraton Hall
11:30am – 12:00pm	Women in Clinical Immunology Sciences Lunch	Grand East
12:00pm - 12:20pm	Lightning Posters	Osgoode Ballroom East
12:20 — 1:00pm	Poster Viewing	Osgoode Ballrooms
1:00pm — 1:30pm	CIS Business Meeting	Grand West and Centre
1:30pm – 3:00pm	Plenary Session: Immune Complications Caused by Therapeutic Intervention	Grand West and Centre
3:00pm – 3:15pm	Afternoon Break	Grand West and Centre
3:15pm — 4:15pm	Plenary Session: Mining Patient Registries: USIDNET and Beyond	Grand West and Centre
4:15pm – 4:30pm	Afternoon Break	Grand West and Centre
4:30pm – 5:30pm	The CIS Fahey/Rose Founders Lecture Tracking the Anti-Donor Alloresponse in Transplant Patients Megan Sykes, MD	Grand West and Centre
5:30pm — 6:00pm	Plenary Session: PID Year in Review	Grand West and Centre
6:30pm - 8:00pm	ECI Reception	Vide Foyer



2018 CIS ANNUAL MEETING SCHEDULE AT-A-GLANCE

7:00am – 8:00am	Breakfast Symposium: Exploring the Immunologic Basis for CGD and Implications for Clinical Practice *Sponsored by Horizon Pharma*	Grand East
7:00am – 8:00am	Continental Breakfast	Lower Concourse
8:00am – 9:50am	Plenary Session: Immune Regulation	Grand West and Centre
9:50am – 10:10am	Morning Break	Grand West and Centre
10:10am — 11:40am	Plenary Session: Transplantation: From Bone Marrow to Solid Organ	Grand West and Centre
11:40am - 12:00pm	Plenary Session: Patient Advocacy Groups Update	Grand West and Centre
12:00pm – 2:00pm	Lunch / Exhibit Hall Open	Sheraton Hall
12:00pm — 1:00pm	ECI Lunch: How I Became an Immunologist	Grand East
1:00pm – 1:20pm	Lightning Posters	Osgoode Ballroom East
1:20pm – 2:00pm	Poster Viewing	Osgoode Ballroom
2:00pm – 3:30pm	Plenary Session: Tales From the Listserv	Grand West and Centre
3:30pm – 4:00pm	Afternoon Break	Grand Foyer
4:00pm — 5:00pm	Richard Schiff Lecture Unraveling Graft-Versus-Host Disease Pathogenesis to Develop New Treatments Bruce Blazar, MD	Grand West and Centre
5:00pm – 5:30pm	CIS Presidential Award Lecture Immune Dysregulation In T Cell Immunodeficiencies: Insights From The Analysis Of Repertoire Diversity And Composition Luigi Notarangelo, MD	Grand West and Centre
5:00pm – 7:00pm	CIS Closing Reception & Exhibit Hall Open	Sheraton Hall/ Osgoode Ballroom

SUNDAY, APRIL 29		
7:00am – 8:00am	Continental Breakfast	Lower Concourse
8:00am — 10:30am	Plenary Session: Hot New Defects in Primary Immunodeficiencies	Grand West and Centre



Thursday, April 26

2:30 pm – 4:40 pm	Welcome from CIS President	
	Roshini Abraham, PhD	
	Mayo Clinic	
2:40 pm — 4:00 pm	CIS Fellowship Grantee Presentations 1.5 AMA PRA Category 1 Credits™	
	Moderators: Roshini Abraham, PhD, Mayo Clinic Shanmuganathan Chandrakasan, MD, Emory University School of Medicine & Children's Healthcare of Atlanta	
	Speaker: Site-Specific Gene Therapy In The Treatment Of X-Linked Hyper-IgM Syndrome Caroline Kuo, MD, University of California, Los Angeles	
	Oral Abstracts: CONDITIONING WITH ANTI-CD45 IMMUNOTOXIN IN A MOUSE MODEL OF HYPOMORPHIC RAG1 DEFICIENCY ALLOWS COMPLETE RECONSTITUTION OF THE IMMUNE SYSTEM WITH LACK OF TOXICITY Enrica Calzoni, MD, Laboratory of Clinical Immunology and Microbiology, DIR, NIAID, NIH DHHS	
	PTCRA MUTATIONS YIELD NOVEL T CELL IMMUNE DEFICIENCY Sarah Henrickson, MD, PhD, Children's Hospital of Philadelphia	
	DIAGNOSIS AND PRE-TRANSPLANT MANAGEMENT OF SCID PATIENTS IN THE ERA OF NEWBORN SCREENING: A SURVEY OF PRACTICES IN THE PRIMARY IMMUNE DEFICIENCY TREATMENT CONSORTIUM Jennifer R. Heimall, MD, Children's Hospital of Philadelphia	Grand West & Centre
4:00pm - 6:00pm	Plenary Session: Patient Management Controversies in PIDs 2 AMA PRA Category 1 Credits™	
	Moderators: Steve Holland, MD, National Institute of Allergy and Infectious Disease, NIH Troy Torgerson, MD, PhD, University of Washington & Seattle Children's Research Institute	
	Panelists: Jack Routes, MD, Medical College of Wisconsin Alexandra Freeman, MD, National Institutes of Health	
	Donald Vinh, MD, FRCP(C), McGill University Health Centre Klaus Warnatz, MD, Medical Center, University of Freiburg Elie Haddad, MD, PhD, CHU Ste-Justine, University of Montreal Lisa Forbes, MD, Baylor College of Medicine	
	Catharina Schuetz, MD, Ulm University Medical Center, Pediatrics, Germany	
6:00pm – 7:00pm	Robert A. Good Lecture 1 AMA PRA Category 1 Credits™	
	Moderator: Troy Torgerson, MD, PhD, University of Washington & Seattle Children's Research Institute	
	Speaker: Genetic Immunodeficiencies and Bone Marrow Failure	
	Akiko Shimamura, MD, PhD, Dana Farber/Boston Children's Cancer and Blood Disorders Center	



Friday, April 27

7:00am – 8:00am	Continental Breakfast	Lower Concourse
7:00am — 8:00am	Genomics 101 A *Separate Registration Required* Isabelle Meyts, MD, PhD, KU Leuven, Belgium Asbjorg Stray-Pedersen, MD, PhD, Oslo University Hospital, Norway	Elgin
7:00am — 8:00am	Genomics 101 B *Separate Registration Required* Ivan Chinn, MD, Baylor College of Medicine Janet Chou, MD, Children's Hospital of Boston	Peel
8:00am — 9:30am	Plenary Session: Cross-Talk: PIDs from the Perspective of Other Specialties 1.5 AMA PRA Category 1 Credits™ Moderators: Francisco Javier Espinosa-Rosales, MD, Centro de Inmunología Alergia y Pediatría Hospital Ángeles Lomas, Mexico Elena Hsieh, MD, University of Colorado Speakers: Very Early Onset Inflammatory Bowel Disease (VEOIBD): Novel Genes, Novel Diseases, Novel Therapies Aleixo Muise, MD, PhD, Sick Kids Toronto When It Rains, It Pours - Tumor Predisposition in PID and Vice Versa Markus Seidel, MD, Medical University Graz Brain on Fire: Inflammatory Brain Disease in Immune Dysregulations Susanne Benseler, MD, PhD, Alberta Children's Hospital, Calgary All That Rashes Is Not Eczema: Deciphering Dermatologic Clues of PID in the Itchy Red Child Markus Boos, MD, PhD, Seattle Children's Hospital Oral Abstract: CLINICAL, IMAGING, AND PATHOLOGY FEATURES OF CYTOTOXIC T-LYMPHOCYTE ANTIGEN 4 HAPLOINSUFFICIENCY ASSOCIATED NEUROINFLAMMATION Matthew Schindler, MD, PhD, National Institute of Neurological Disorders and Stroke	Grand West & Centre
9:30am – 9:45am	Morning Break	
9:45am — 11:30am	Plenary Session: The Thymus: Understanding the Biology, Diseases, and Treatment 1.75 AMA PRA Category 1 Credits™ Moderators: Stuart Turvey, MBBS, DPhil, FRCPC, University of British Columbia Joyce Yu, MD, Morgan Stanley Children's Hospital/Columbia University Medical Center Speakers: Fixing To Regenerate Human T-Lymphopoiesis Juan Carlos Zúñiga-Pflücker, PhD, Sunnybrook Research Institute, Canada Mechanisms That Regulate Pathways in Intrathymic T-cell Development Graham Anderson, PhD, University of Birmingham, UK Thymus Transplant and Update on Thymus Transplant Task Force Mary Louise Markert, MD, PhD, Duke University School of Medicine Oral Abstract: RAG1 HYPOMORPHIC MOUSE MUTANTS SHOW PARTIAL PRESERVATION OF THYMOCYTE DEVELOPMENT BUT PECULIAR ABNORMALITIES OF THYMIC EPITHELIAL CELL PHENOTYPE Marita Bosticardo, PhD, National Institute of Allergy and Infectious Disease, NIH	Grand West & Centre



Friday, April 27, continued

11:30am — 1:00pm	Lunch / Exhibit Hall Open	Sheraton Hall & Osgoode Ballroom
11:30am — 12:30pm	Women in Clinical Immunology Sciences Luncheon Panelists: Alexandra Freeman, MD Charlotte Cunningham-Rundles, MD, PhD Jennifer Heimall, MD Elena Perez, MD, PhD	Grand East
12:00pm — 12:20pm	Lightning Poster Presentations Moderators: Roshini Abraham, PhD, Mayo Clinic Troy Torgerson, MD, PhD, University of Washington & Seattle Children's Research Institute Posters: PARACOCCIDIOIDOMYCOSIS ASSOCIATED WITH A HETEROZYGOUS STATA MUTATION AND IMPAIRED IFN-F IMMUNITY Antonio Condino-Neto, MD, PhD, University of São Paulo ALTERNATIONS IN REPERTOIRE OF T AND B CELL SUBSETS IN PATIENTS WITH PARTIAL RECOMBINATION ACTIVATING GENE (RAG) DEFICIENCY WITH AUTOIMMUNITY AND HISTORY OF VIRAL INFECTIONS Krisztian Csomos, PhD, University of South Florida A CELL BASED ASSAY FOR THE DETECTION OF AUTOANTIBODIES TO IL-17 IN HUMAN SERUM Matt Phillips, PhD, National Jewish Health CHROMOSOME 22Q11.2 DELETION SIZE AFFECTS PERIPHERAL LYMPHOCYTE SUBSET COUNTS Melanie Ruffner, MD, PhD, Children's Hospital of Philadelphia PROFOUND B CELL LYMPHOPENIA IN GOF-STAT1 THAT IMPROVES POST RUXOLITINIB Tara Saco, MD, University of South Florida	Osgoode Ballroom East
12:20pm — 1:00pm	Poster Viewing Poster Viewing	Sheraton Hall & Osgoode Ballroom
1:00pm — 1:30pm	CIS Business Meeting & Award Presentations All CIS Members are invited to attend.	Grand West & Centre
1:30pm – 3:00pm	Plenary Session: Immune Complications Caused by Therapeutic Intervention 1.5 AMA PRA Category 1 Credits™ Moderators: James Chipeta, BSc, MBChB, PhD, University of Zambia Monica Lawrence, MD, University of Virginia Speakers: B Cell Depleting Immunotherapies: Complications and Opportunities Thomas Tedder, PhD, Duke School of Medicine Immune Dysregulation Following the Use of Checkpoint Inhibitors for Malignancies Maria Suarez-Almazor, MD, PhD, MD Anderson Cancer Center Immune Defects and Complications Following CAR-T Cell Therapies Kevin Curran, MD, Memorial Sloan Kettering Cancer Center Fontan and T Cell Lymphopenia Jennifer Heimall, MD, Children's Hospital of Philadelphia Oral Abstract: VEDOLIZUMAB FOR AUTOIMMUNE ENTEROPATHY IN PRIMARY IMMUNODEFICIENCY: A CASE SERIES OF OUTCOMES Travis Sifers, MD, Icahn School of Medicine at Mount Sinai	Grand West & Centre

Friday, April 27, continued

245 445		
3:15pm — 4:15pm	Plenary Session: Mining Patient Registries: USIDNET and Beyond	
	1 AMA PRA Category 1 Credits™ *Sponsored by USIDNET*	
	Moderators:	
	Kathleen Sullivan, MD, PhD, Children's Hospital of Philadelphia Charlotte Cunningham-Rundles, MD, PHD, Mt. Sinai Medical Center	
	Speaker:	
	Update on the CEREDIH Registry Nizar Mahlaoui, MD, MSc, MPH, French National Reference Center for Primary Immune Deficiencies	
	(CEREDIH), Necker Enfants Malades Hospital, University Paris Descartes, France	
	Oral Abstracts:	
	PROPHYLACTIC ANTIBIOTICS VS. IMMUNOGLOBULIN REPLACEMENT IN PATIENTS WITH SPECIFIC ANTIBODY	
	DEFICIENCY	
	Joud Hajjar, MD, Baylor College of Medicine	Grand West & Centre
	IMPACT OF PULMONARY COMPLICATIONS ON QUALITY OF LIFE IN THE USIDNET REGISTRY	diana west & centre
	Kaileen Rohr, MD, Columbia University Medical Center	
	NEUROLOGIC COMPLICATIONS OF COMMON VARIABLE IMMUNODEFICIENCY: FINDINGS FROM THE USIDNET	
	REGISTRY	
	Jenna Nguyen, MD, University of California, San Francisco	
4:15pm – 4:30pm	Afternoon Break	
4:30pm – 5:30pm	CIS Fahey/Rose Lecture	
	1 AMA PRA Category 1 Credits™	
	Moderator:	
	Megan Cooper, MD, PhD, Washington University in St. Louis	
	Speaker:	
	Tracking the Anti-Donor Alloresponse in Transplant Patients	
	Megan Sykes, MD, Columbia Center for Translational Immunology	

Friday, April 27, continued

5:30pm — 6:00pm	Plenary Session: PID Year in Review .5 AMA PRA Category 1 Credits™	
	Article 1: "X-linked carriers of chronic granulomatous disease: Illness, lyonization, and stability" Journal of Allergy and Clinical Immunology, Volume 141, Issue 1, 365 - 371 Presenter: Kelli Williams, MD, MPH, Medical University of South Carolina Mentor: Alexandra Freeman, MD	
	Article 2: "BACH2 immunodeficiency illustrates an association between super-enhancers and haploinsufficiency." Nat Immunol. 2017 Jul;18(7):813-823. doi: 10.1038/ni.3753. Presenter: Hey Chong, MD, PhD, University of Pittsburgh Children's Hospital Mentor: Isabelle Meyts, MD, PhD, KU Leuven	
	Article 3: "Effective "activated PI3Kδ syndrome"—targeted therapy with the PI3Kδ inhibitor leniolisib." Blood Nov 2017, 130 (21) 2307-2316; DOI: 10.1182/blood-2017-08-801191 Presenter: Nicholas Hartog, MD, Helen DeVos Children's Hospital and Spectrum Health Medical Group Mentor: Nicola Wright, MD, Alberta Children's Hospital	Grand West & Centre
	Article 4: "Long-term follow up of IPEX syndrome patients after different therapeutic strategies: an international multicenter retrospective study." J Allergy Clin Immunol. 2017 Dec 11. pii: S0091-6749(17)31893-6. doi: 10.1016/j.jaci.2017.10.041 Presenter: Kiran Patel, MD, Emory University Mentor: Magda Carneiro-Sampaio, MD, PhD, Universidade De Sao Paulo	
	Article 5: "Human NACHT, LRR, and PYD domain-containing protein 3 (NLRP3) inflammasome activity is regulated by and potentially targetable through Bruton tyrosine kinase." J Allergy Clin Immunol 140(4): 1054-1067 e1010 Presenter: Joud Hajjar, MD, Baylor College of Medicine Mentor: Thomas Isskeutz, MD, Dalhousie University	

Saturday, April 28

7:00am – 8:00am	Continental Breakfast	Lower Concourse
7:00am — 8:00am	Breakfast Symposium: Exploring the Immunologic Basis for CGD and Implications for Clinical Practice *Sponsored by Horizon Pharma*	Grand East
7:00am — 8:00am	Flow 101 A *Separate Registration Required* Troy Torgerson, MD, PhD, University of Washington David Hagin, MD, PhD, Tel-Aviv Sourasky Medical Center, Israel	Elgin
7:00am — 8:00am	**Flow 101 B *Separate Registration Required* Michael Keeney, London Health Sciences Center (Ontario) James Verbsky, MD, PhD, Medical College of Wisconsin	Peel



Saturday, April 28, continued

8:00am – 9:50am	Plenary Session: Novel Insights and Approaches to Regulating Immunity	
	2 AMA PRA Category 1 Credits™	
	Moderators: Sarah Henrickson, MD, PhD, Children's Hospital of Philadelphia	
	Manish Butte, MD, PhD, UCLA	
	Speakers:	
	New Treatments for Interferonopathies	
	Yanick Crow, BMedSci, MBBS, MRCP, PhD, University of Manchester, UK Tailoring Thymic Tregs for Cellular Therapy	
	Megan Levings, PhD, BC Children's Hospital Research Institute, Canada	
	New Insights in Treg Biology in Human Health and Disease	
	Ciriaco A. Piccirillo, PhD, McGill University, Canada	
	Early-Onset Immune Dysregulation and Targeted Therapies Kaan Boztug, MD, University of Vienna	
	Ustekinumab in Treating Complications of LAD	
	Steve Holland, MD, National Institute of Allergy and Infectious Disease, NIH	
	Oral Abstract:	
	FOXP3 GENE TRANSFER IN T CELLS AND FOXP3 GENE EDITING IN HSC AS NOVEL TREATMENT OPTIONS FOR IPEX SYNDROME	
	Rosa Bacchetta, MD, Stanford University School of Medicine	
9:50am –10:10am	Morning Break	
10:10am — 11:40am	Plenary Session: Transplantation: From Bone Marrow to Solid Organ	
	1.5 AMA PRA Category 1 Credits™	Grand West & Centre
	Moderators:	
	Hélène Decaluwe, MD, PhD, FRCPC, CHU Sainte-Justine and University of Montreal Eyal Grunebaum, MD, Hospital for Sick Children	
	Speakers:	
	PIDTC Year in Review	
	What Have We Learned From The PIDTC Retrospective And Prospective Studies On SCID Flia Haddad AD PLD CHILSto Justine University of Montreal On Science Studies On SCID Flia Haddad AD PLD CHILSto Justine University of Montreal On Science Studies On SCID Flia Haddad AD PLD CHILSto Justine University of Montreal On Science Studies On SCID	
	 Elie Haddad, MD, PhD, CHU Ste-Justine, University of Montreal 6903- What We Know So Far About Transplant for CGD 	
	Elizabeth Kang, MD, National Institute of Allergy and Infectious Disease, NIH	
	The PIDTC At 8 Years Old: What Have We Accomplished? The PIDTC At 8 Years Old: What Have We Accomplished?	
	Morton Cowan, MD, UCSF Benioff Children's Hospital	
	SOT/HCT Combined Transplantation Paul Szabolcs, MD, Children's Hospital of Pittsburgh	
	Oral Abstracts:	
	ABERRANT T CELL ACTIVATION AND EXHAUSTION DEVELOPS IN POORLY RECONSTITUTED SCID SURVIVORS	
	AFTER TRANSPLANT AND CORRELATES WITH THE ABSENCE OF CONDITIONING REGIMEN: A PRIMARY IMMUNE	
	DEFICIENCY TREATMENT CONSORTIUM (PIDTC) STUDY Hélène Decaluwe, MD, PhD, FRCPC, CHU Sainte-Justine and University of Montreal	
	LATIN-AMERICAN CONSENSUS ON THE MANAGEMENT OF PATIENTS WITH SEVERE COMBINED	
	IMMUNODEFICIENCY, PART 1: "SUPPORTIVE MEASURES DURING THE TIME FROM DIAGNOSIS TO DEFINITIVE	
	TREATMENT."	
	Juan Carlos Bustamante Ogando, MD, National Institute of Pediatrics	

Saturday, April 28, continued

11:40am — 12:00pm	Plenary: Patient Advocacy Groups Update .5 AMA PRA Category 1 Credits™ Moderator:	
	Kathleen Sullivan, MD, PhD, Children's Hospital of Philadelphia	Grand West & Centre
	<u>Speakers:</u> Fred Modell, The Jeffrey Modell Foundation	
	Marcia Boyle, Immune Deficiency Foundation	
12:00pm — 2:00pm	Lunch/Exhibit Hall Open	Sheraton Hall & Osgoode Ballroom
12:00pm — 1:00pm	ECI Luncheon: How I Became an Immunologist	
	Panelists: • Alexandra Freeman, MD	
	David Hagin, MD, PhD	Grand East
	Michael Keller, MD Jennifer Leiding, MD	
	Andy Snow, PhD	
1:00pm — 1:20pm	Lightning Poster Presentations	
	Moderators: Roshini Abraham, PhD, Mayo Clinic Troy Torgerson, MD, PhD, University of Washington & Seattle Children's Research Institute	
	Posters:	
	IGG4-RELATED DISEASE (IGG4-RD), ITS COMMON MIMICKERS AND RESPONSE TO ANTI-IL5-(RESLIZUMAB) TREATMENT	
	Rachel Eisenberg, MD, Montefiore Medical Center	
	PROMISE AND PITFALLS OF NEXT-GENERATION SEQUENCING Amy Hsu, BA, National Institutes of Health	Osgoode Ballroom East
	MOLECULAR CHARACTERISATION OF CHRONIC GRANULOMATOUS DISEASE (CGD) PATIENTS IN A COHORT OF INDIA	osgoode builloom East
	Manasi Kulkarni, MSc, National Institute Of Immunohaematology	
	IMMUNE -DYSREGULATION MIMICKING SYSTEMIC LUPUS ERYTHEMATOSUS IN A PATIENT WITH LYSINURIC PROTEIN INTOLERANCE	
	Maria Cecilia Poli, MD, Baylor College of Medicine	
	IKBKB SEVERE COMBINED IMMUNODEFICIENCY: CLINICAL AND IMMUNOLOGIC PHENOTYPE AND STEM CELL TRANSPLANT OUTCOMES	
	Tamar Rubin, MD, FRCPC, University of Manitoba	
1:20pm — 2:00pm	Poster Viewing	Sheraton Hall & Osgoode Ballroom



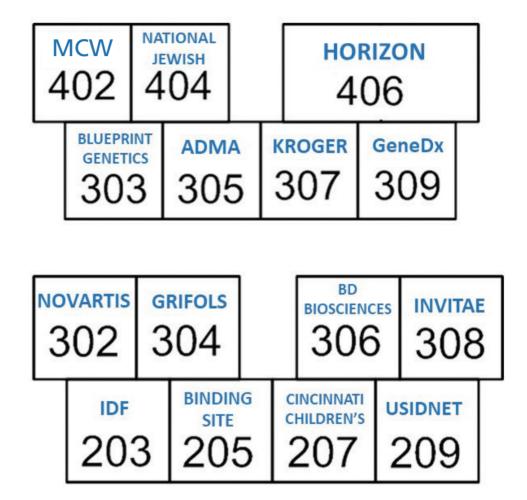
Saturday, April 28, continued

2:00pm — 3:30pm	Plenary Session: Tales from the Listserv 1.5 AMA PRA Category 1 Credits™ Moderators: Elie Haddad, MD, PhD, CHU Ste-Justine, University of Montreal Mikko Seppänen, MD, PhD, Helsinki University Central Hospital Eric Allenspach, MD, PhD, Seattle Children's Hospital Mystery Case #1 Donald C. Vinh, MD, FRCP(C), McGill University Health Centre Mystery Case #2 Jennifer Leiding, MD, University of South Florida Mystery Case #3 David Buchbinder, MD, MS, Children's Hospital of Orange County	
3:30pm – 4:00pm 4:00pm – 5:00pm	Afternoon Break Richard Schiff Lecture 1 AMA PRA Category 1 Credits™ Moderator:	Grand West & Centre
	Jack Routes, MD, Medical College of Wisconsin Speaker: Unraveling Graft-Versus-Host Disease Pathogenesis to Develop New Treatments Bruce Blazar, MD, University of Minnesota	
5:00pm — 5:30pm	Supported by an unrestricted educational grant from Shire Plenary Session: CIS Presidential Award Lecture .5 AMA PRA Category 1 Credits™ Moderator: Roshini Abraham, PhD, Mayo Clinic	
	Speaker: Immune Dysregulation In T Cell Immunodeficiencies: Insights From The Analysis Of Repertoire Diversity And Composition Luigi Notarangelo, MD, National Institutes of Health	
5:30pm — 7:30pm	Closing Reception and Exhibit Hall Open	Sheraton Hall & Osgoode Ballroom

Sunday, April 29

7:00am – 8:00am	Continental Breakfast	Vide Foyer
8:00am – 10:30am	Plenary Session: Hot New Defects in Primary Immunodeficencies 2.5 AMA PRA Category 1 Credits™	Grand West & Centre
	Moderators: Andrew Cant, MD, Newcastle General Hospital Lahari Rampur, MD, University of Washington Medical Center	
	Speakers: New Autoinflammatory Defects Ivona Aksentijevich, MD, National Institutes of Health Novel Neomorphic Gain-Of-Function Autoinflammatory Disease Activating Non-Canonical Inflammasome Helka Göös, MD, University of Helsinki TLR7 Deficiency Eric Meffre, PhD, Yale University	
	Oral Abstracts: HUMAN PI3KGAMMA DEFICIENCY WITH HUMORAL DEFECTS AND LYMPHOCYTIC INFILTRATION OF BARRIER TISSUES Carrie Lucas, PhD, Yale University	
	IL2RB DEFICIENCY RESULTS IN EARLY-ONSET LYMPHOPROLIFERATION, MULTISYSTEM AUTOIMMUNITY, AND PERVASIVE CMV INFECTION Elena Hsieh, MD, University of Colorado, Denver	
	DOMINANT NEGATIVE IKZF1 MUTATIONS CAUSE A NOVEL COMBINED IMMUNODEFICIENCY Hye Sun Kuehn, PhD, NIH	

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DC OUTREACH
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LEADIANT BIOSCIENCES
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BECKMAN COULTER
108



EXHIBITOR LISTING

BOOTH 305

ADMA Biologics

ADMA Biologics is a US-based vertically integrated plasma products manufacturer committed to developing specialty plasma-derived products for the immune-compromised and other patients at risk for infection. It is our devotion to these underserved populations that fuels us, and our hands-on approach to production and development that sets us apart. Learn more about our products and capabilities at exhibit #305 and visit us at www.admabiologics.com.

BOOTH 306

BD Bioscience

BD is a global medical technology company that is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. BD Biosciences provides flow cytometers, reagents, tools, and a wide range of services to support the work of researchers and clinicians who understand disease and improve care. BD Biosciences clinical flow cytometry solutions, including instrumentation, software, and reagents, offer greater accuracy and efficiency through innovation.

BOOTH 108

Beckman Coulter

Beckman Coulter develops, manufactures and markets products that simplify, automate and innovate complex biomedical testing. More than 275,000 Beckman Coulter systems operate in both Diagnostics and Life Sciences laboratories on seven continents. For over 75 years, our products have been making a difference in peoples' lives by improving the productivity of medical professionals and scientists, supplying critical information for improving patient health and delivering trusted solutions for research and discovery. From basic cellular analysis to advanced cell sorting methods and flow cytometry applications count on Beckman Coulter for efficient and reliable solutions to today's research challenges.

BOOTH 205

Binding Site

Binding Site is committed to developing special protein assays and automated systems for the improvement of patient care. The market leader in immunodiagnostics for Immunodeficiency, Binding Site assays measure specific antibody response to vaccinations and quantify immunoglobulins, IgG and IgA subclasses. Run on the Optilite® analyzer, the future of special protein testing, our wide menu of assays includes Freelite® for the diagnosis and monitoring of myeloma. With our extensive development expertise, patented antibody production technology, and medical educators, backed by clinical practice guidelines, Binding Site provides healthcare professionals with tools to significantly improve diagnosis and management of patients. www. bindingsite.com

BOOTH 303

Blueprint Genetics

Blueprint Genetics delivers high-quality genetic testing to the global clinical community. Through our innovative laboratory process, latest sequencing technology with Al empowered data crunching tools, and experienced professionals, we are advancing mainstream healthcare. As the most transparent genetic diagnostic company on the market, we offer full access to our methodology, sensitivity, performance data, and analytic validations of our testing platform.

BOOTH 207

Cincinnati Children's Hospital Medical Center

The Molecular Genetics Laboratory at Cincinnati Children's is one of the largest and most specialized academic molecular genetics labs in the nation. We combine state-of-the-art genetic testing with comprehensive interpretation of test results by nationally recognized, board certified pediatric specialists, geneticists and genetic counselors to provide clinically relevant molecular tests for a variety of genetic disorders and risk factors.

BOOTH 104

Dyskeratosis Congenita Outreach, Inc.

Our mission is to provide information and support services to families worldwide affected by Dyskeratosis Congenita and Telomere Biology Disorders, to encourage the medical community's research in finding causes and effective treatments, and to facility improved diagnosis by educating medical providers.

BOOTH 309

GeneDx

GeneDx, a leader in genomics with expertise in rare genetic disorders, offers one of the broadest menus of sequencing services available. GeneDx provides testing to patients in more than 55 countries, and is a business unit of BioReference Laboratories, a wholly owned subsidiary of OPKO Health, Inc. Please visit www. genedx.com.

BOOTH 304

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 406

Horizon Pharma

Horizon Pharma plc is a biopharmaceutical company focused on improving patients' lives by identifying, developing, acquiring and commercializing differentiated and accessible medicines that address unmet medical needs. We market 11 medicines through our rare disease, rheumatology and primary care business units.

BOOTH 203

Immune Deficiency Foundation

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

BOOTH 308

Invitae

Invitae is a genetic information company whose mission is to bring genetic information into mainstream medical practice to improve the quality of healthcare for billions of people. Visit www.invitae.com.

BOOTH 307

Kroger Specialty Infusion

Kroger Specialty Infusion is a specialty provider of IgG therapy. Our unique service model includes pharmacy expertise that includes review and monitoring of 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.



EXHIBITOR LISTING

BOOTH 106

Leadiant Biosciences Inc.

Leadiant Biosciences, Inc. is a rare corporation dedicated to creating novel medicines for the unmet needs of patients with rare diseases. Truly unique in its field, Leadiant Biosciences places its considerable scientific resources behind the discovery of compounds that benefit the few. Simply because it's the right thing to do. By maintaining an environment based on integrity, commitment, and placing the patient first, Leadiant Biosciences is able to consider what may be a small commercial success nothing less than a human triumph.

BOOTH 402

Medical College of Wisconsin

The Clinical Immunodiagnostic and Research Laboratory (CIRL) and Allergy Immunology Diagnostic Lab Center (AIDLC), at MCW, perform comprehensive testing for the diagnosis of primary immunodeficiencies (PIDs) and allergic disorders. The CIRL performs immunophenotyping and flow cytometric-based functional assays to aid in the screening and diagnosis of PIDs. The AIDLC performs serologic assays for the diagnosis of hypersensitivity pneumonitis, allergic bronchopulmonary aspergillosis and latex allergy. The AIDLC also performs a Salmonella Typhi IgG assay to quantitate specific antibody responses to the killed polysaccharide S. typhi vaccine.

BOOTH 404

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 302

Novartis

Novartis provides innovative healthcare solutions that address the evolving needs of patients and societies. Headquartered in Basel, Switzerland, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, eye care and cost-saving generic pharmaceuticals. Novartis is the only global company with leading positions in these areas. Novartis products are available in more than 180 countries around the world. For more information, please visit http://www.novartis.com. Phone: 862 778 2100

BOOTH 100

Shire

Shire is the leading global biotechnology company focused on serving people with rare diseases and other highly specialized conditions. We strive to develop best-in-class products across our core therapeutic areas including Hematology, Immunology, Neuroscience, Ophthalmics, Lysosomal Storage Disorders, Gastrointestinal/Internal Medicine/Endocrine, Hereditary Angioedema, and Oncology.

BOOTH 209

USIDNET

The United States Immunodeficiency Network (USIDNET) is an NIH-funded research program of the Immune Deficiency Foundation (IDF), established to advance scientific research in primary immune deficiency diseases (PI).



	WILL ALSO BE PRESENTED	WILL ALSO BE PF		DESIGNATED A SPECIAL MENTION POSTER
А	S A LIGHTNING POSTER ON FRIDAY	AS A LIGHTNING POSTE	R ON SATURDAY	BY THE PROGRAM COMMITTEE
POSTER	TITLE		NAME	ORGANIZATION
1	ISOFORM SPECIFIC MUTATIONS IN STAT3 W PHENOTYPE	ITH VARIED HYPER IGE	Alexandra Freeman	National Institutes of Health
2	A NOVEL NFKB1 (NUCLEAR FACTOR KAPPA P.Q805Q) ASSOCIATED WITH PYODERMA GA VARIABLE IMMUNE DEFICIENCY		Alison Thompson	Yale New Haven Hospital
3	PULMONARY DISEASE IN AUTOSOMAL DON	MINANT HYPER IGE SYNDROME	Amanda Urban	Leidos Biomedical Research/NIH
4	DIAGNOSTIC UTILITY OF EXOME SEQUENCING IMMUNE SYSTEM	NG FOR DISORDERS OF THE	Amber Begtrup	GeneDx
5	CARTILAGE HAIR HYPOPLASIA: HETEROGEN AND MANAGEMENT AMONG SIBLINGS	NEITY IN CLINICAL FEATURES	Amiirah Aujnarain	The Hospital for Sick Children
6	NOVEL NLRC4 GAIN-OF-FUNCTION MUTATI NEONATAL ENTEROCOLITIS AND AUTOINFLA CLINICAL RESPONSE TO RAPAMYCIN AND A	AMMATION, WITH POSITIVE	Annaliesse Blincoe	CHU Sainte-Justine
7	MOLECULAR CHARACTERISATION OF CHRO DISEASE (CGD) PATIENTS IN A COHORT OF I		Manasi Kulkarni	National Institute Of Immunohaematology
8	IMMUNE -DYSREGULATION MIMICKING SYSERYTHEMATOSUS IN A PATIENT WITH LYSIN		Maria Cecilia Poli	Baylor College of Medicine
9	IGG4-RELATED DISEASE (IGG4-RD), ITS COM RESPONSE TO ANTI-IL5-(RESLIZUMAB) TRE		Rachel Eisenberg	Montefiore Medical Center
10	IKBKB SEVERE COMBINED IMMUNODEFICIE IMMUNOLOGIC PHENOTYPE AND STEM CEL		Tamar Rubin	University of Manitoba
11	PARACOCCIDIOIDOMYCOSIS ASSOCIATED W MUTATION AND IMPAIRED IFN-F IMMUNIT		Antonio Condino-Neto	University of São Paulo
12	ALTERNATIONS IN REPERTOIRE OF T AND B WITH PARTIAL RECOMBINATION ACTIVATIN WITH AUTOIMMUNITY AND HISTORY OF VI	IG GENE (RAG) DEFICIENCY	Krisztian Csomos	University of South Florida
13	A CELL BASED ASSAY FOR THE DETECTION OF IN HUMAN SERUM.	OF AUTOANTIBODIES TO IL-17	Matt Phillips	National Jewish Health
14	CHROMOSOME 22Q11.2 DELETION SIZE AF LYMPHOCYTE SUBSET COUNTS	FECTS PERIPHERAL	Melanie Ruffner	Children's Hospital of Philadelphia
15	PROFOUND B CELL LYMPHOPENIA IN GOF-S	STAT1 THAT IMPROVES POST	Tara Saco	USF Allergy/Immunology
16	NOVEL GENETIC VARIANTS IN A COHORT OF IMMUNODEFICIENCY FROM INDIA	SEVERE COMBINED	Amit Rawat	Posgraduate Institute of Medical Education and Research, Chandigarh
17	USING THE WHOLE EXOME SEQUENCING (V DIAGNOSIS AND CLINICAL MANAGEMENT I DEFICIENCIES (PIDS) IN ISRAEL		Amos Simon	Sheba Medical Center, Tel-Hashomer, Israel
18	PROMISE AND PITFALLS OF NEXT-GENERAT	ION SEQUENCING	Amy Hsu	National Institutes of Health
19	WARTS AS A PREDOMINANT MANIFESTATION	ON OF ADA2 DEFICIENCY	Anahita Agharahimi	National Institutes of Health
20	REPORT OF 9 YEARS OF PRIMARY IMMUNO CENTERS IN ARGENTINA FOR THE LATIN AN IMMUNODEFICIENCIES, REGISTRY MODEL		Analia Seminario	Hospital de Niños Ricardo Gutierrez



POSTER	TITLE	NAME	ORGANIZATION
21	HYPOMORPHIC CARD11 MUTATIONS ASSOCIATED WITH DIVERSE IMMUNOLOGIC PHENOTYPES WITH OR WITHOUT ATOPIC DISEASE.	Andrew Snow	Uniformed Services University of the Health Sciences
22	A RARE CASE OF FAMILIAL HLH DUE TO HOMOZYGOUS MUTATIONS IN PRFI WITH ISOLATED CNS INVOLVEMENT.	Annaliesse Blincoe	CHU Sainte-Justine
23	MUTATION IN NLRP12 RESPONSIBLE FOR FAMILIAL COLD AUTOINFLAMMATORY SYNDROME	Annaliesse Blincoe	CHU Sainte-Justine
24	THE EFFECTS OF BMI AND ROUTE OF ADMINISTRATION ON EFFICACY OF IMMUNOGLOBULIN G REPLACEMENT THERAPY	Artemio Jongco	NorthWell Health
25	INTERIM ANALYSIS OF THE GLOBAL POST AUTHORIZATION SAFETY STUDY OF HYALURONIDASE-FACILITATED SUBCUTANEOUS IMMUNOGLOBULIN 10% TREATMENT IN PATIENTS WITH PRIMARY IMMUNODEFICIENCY DISEASES	Arye Rubinstein	Albert Einstein College of Medicine and Montefiore Hospital
26	XLA IMMUNE DEFICIENCY COMPLICATED BY FLEXISPIRA INFECTION	Ashleigh Sun	NIH/NIAID/LCIM
27	RECURRENT INFECTIONS, CONGENITAL ICHTHYOSIS AND ATOPY: A MIXED GENOTYPE	Ashley Devonshire	Northwestern University/Ann & Robert H. Lurie Children's Hospital of Chicago
28	DISTINCT CLINICAL AND IMMUNOLOGIC COURSE IN TWO IL7RA DEFICIENT PATIENTS HARBORING THE SAME MUTATION, IDENTIFIED IN THE ISRAELI NEWBORN SCREENING PROGRAM FOR SCID	Atar Lev	Sheba Medical Center
29	GRAFT VERSUS HOST DISEASE FOLLOWING HLA- MATCHED SIBLING DONOR COMPARED WITH MATCHED RELATED DONOR FOR HEMATOPOIETIC STEM CELL TRANSPLANTATION IN THE TREATMENT OF SEVERE COMBINED IMMUNODEFICIENCY DISEASE	Bandar Al Saud	King Faisal Specialist Hospital & Research Center
30	TAP WATER - A NOSOCOMIAL SOURCE OF RAPID GROWING NONTUBERCULOUS MYCOBACTERIA	Blachy Davila Saldana	Children's National Medical Center
31	A CASE OF CUTANEOUS T-CELL LYMPHOMA IN A PATIENT WITH NETHERTON SYNDROME	Brittany Hines	Mayo Clinic Arizona
32	RARE CASE OF LATE PRESENTATION OF TETRATRICOPEPTIDE REPEAT DOMAIN 7A (TTC7A) DEFICIENCY WITH SEVERE NK CELL DYSFUNCTION	Candace Rypien	Alberta Children's Hospital
33	OVERCOMING HEALTH SYSTEM BARRIERS TO PROVIDE IDEAL CARE TO INFANTS WITH SCID IDENTIFIED THROUGH NEWBORN SCREEN	Carla Duff	University of South Florida
34	ADENOSINE DEAMINASE (ADA)-DEFICIENT SEVERE COMBINED IMMUNE DEFICIENCY (SCID): ANALYSIS OF CASES ENROLLED IN PROTOCOLS OF THE PRIMARY IMMUNE DEFICIENCY TREATMENT CONSORTIUM (PIDTC).	Caroline Kuo	University of California, Los Angeles
35	THE NATURAL HISTORY OF PATIENTS WITH PROFOUND COMBINED IMMUNODEFICIENCY (PCID): INTERIMS ANALYSIS OF AN INTERNATIONAL PROSPECTIVE MULTICENTER STUDY.	Carsten Speckmann	University of Freiburg Medical Center
36	IS PULMONARY ARTERIAL HYPERTENSION A RISK POST-SPLENECTOMY IN COMMON VARIABLE IMMUNODEFICIENCY?	Yael Gernez	Stanford University School Of Medicine
37	HYPOGAMMAGLOBULINEMIA RESTRICTED TO PREGNANCY REQUIRING IMMUNOGLOBULIN REPLACEMENT	Charmi Patel	Hofstra Northwell School of Medicine/ Northwell Health Allergy & Immunology
38	PHENOTYPE OF TRANSIENT HYPOGAMMAGLOBULINEMIA OF INFANCY ASSOCIATED WITH SEVERE ATOPIC DERMATITIS	Charmi Patel	Hofstra Northwell School of Medicine/ Northwell Health Allergy & Immunology
39	UTILITY OF IMMUNOGLOBULIN REPLACEMENT THERAPY IN A PATIENT WITH MANNOSE-BINDING LECTIN DEFICIENCY	Charmi Patel	Hofstra Northwell School of Medicine/ Northwell Health Allergy & Immunology

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40	CD96 CORRELATES TO HUMAN NK CELL EXHAUSTION AND PREDICTS THE PROGNOSIS OF HCC PATIENTS	Cheng Sun	Institute of Immunology
41	LOW CD160 EXPRESSION CONTRIBUTES TO NK CELL EXHAUSTION AND PREDICTS A POOR PROGNOSIS OF PATIENTS WITH LIVER CANCER	Cheng Sun	Institute of Immunology
42	CLINICAL CHARACTERISTICS AND GENETIC PROFILES OF SEVERE COMBINED IMMUNODEFICIENCY: A SINGLE CENTER EXPERIENCE IN CHINA FROM 2004 TO 2016	Chen-Xing Zhang	Shanghai Children's Medical Center
43	DOES THE MEASUREMENT OF IGG SUBCLASSES HAVE A UTILITY IN CVID PATIENTS?	Clare Tange	The Binding Site
44	IMMUNE RECONSTITUTION FOLLOWING TCR-ALPHA/BETA- AND CD19-DEPLETED HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR HEMATOLOGIC MALIGNANCY IN CHILDREN	Danielle Arnold	Children's Hospital of Philadelphia
45	RUBELLA VIRUS ASSOCIATED CUTANEOUS GRANULOMATOUS DISEASE: A UNIQUE COMPLICATION IN PATIENTS WITH DNA REPAIR DISORDERS	David Buchbinder	Children's Hospital of Orange County
46	IMMUNODEFICIENCY IN A PATIENT WITH PITT HOPKINS SYNDROME REQUIRING IMMUNOGLOBULIN REPLACEMENT THERAPY	David Rosenthal	NorthWell Health
47	GENE THERAPY FOR ADENOSINE DEAMINASE-DEFICIENT SEVERE COMBINED IMMUNODEFICIENCY (ADA SCID) WITH A LENTIVIRAL VECTOR.	Donald Kohn	University of California, Los Angeles
48	PHARMACOKINETIC ANALYSIS OF BIWEEKLY ADMINISTRATION OF HIZENTRA® IN PATIENTS WITH PRIMARY IMMUNODEFICIENCY	Elie Haddad	CHU-Ste. Justine
49	RECENT OUTCOME OF HEMATOPOIETIC CELL TRANSPLANTATION FOR WISKOTT-ALDRICH SYNDROME IS EXCELLENT IN ALL DONOR TYPES: A PRIMARY IMMUNE DEFICIENCY TREATMENT CONSORTIUM (PIDTC) STUDY	Elie Haddad	CHU-Ste. Justine
50	MUTATIONS IN NFKB ESSENTIAL MODULATOR IN THE USIDNET REGISTRY: SPECTRUM OF THE CLINICAL PHENOTYPE	Elizabeth Feuille	Weill Cornell Medicine
51	DISSEMINATED BCG PRESENTING AS AN ORBITAL MASS IN AN INFANT WITH UNDIAGNOSED SCID	Elizabeth Hicks	VCUHS
52	CARTILAGE HAIR HYPOPLASIA DETECTED ON NEWBORN SCREENING	Emma Westermann-Clark	University of South Florida
53	A CASE OF RECURRENT PROTAMINE HYPERSENSITIVITY	Erin Chew	Baylor College of Medicine
54	SON'S DISEASE GIVES ANSWERS FOR MOM: HIGHLY SKEWED LYONIZATION PATTERN IN X-LINKED CHRONIC GRANULOMATOUS DISEASE	Erinn Kellner	Northwestern Feinberg School of Medicine
55	UNUSUAL FUNGAL INFECTION IN ADULTS' CHRONIC GRANULOMATOUS DISEASES	Esmaeil Mortaz	UIPS
56	DOCK8 IMMUNODEFICIENCY SYNDROME PRESENTED SLE IN 16 MONTH- YEAR-OLD BOY	Euri Seo	Asan Medical Center Children's Hospital
57	CLINICAL CHALLENGES OF PATIENT WITH POLE-1 DEFICIENCY AND PROGRESSIVE IMMUNOLOGICAL DECLINE	Fatima Khan	USF All Children's Hospital at John Hopkins
58	CTLA-4 HAPLOINSUFFICIENCY PRESENTING IN A CHILD WITH VERY EARLY-ONSET COLITIS	Fatima Khan	USF All Children's Hospital at John Hopkins
59	PSYCHIATRIC ASPECTS OF PATIENTS WITH PRIMARY IMMUNODEFICIENCY AND THEIR PARENTS	Ferah Genel	Dr. Behcet Uz Children's Hospital
60	A NOVEL EP300 MUTATION ASSOCIATED WITH RUBINSTEIN-TAYBI SYNDROME PRESENTING AS COMBINED IMMUNODEFICIENCY	Francesco Saettini	Department of Pediatrics - University of Milan-Bicocca



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61	UNCOVERING PRIMARY IMMUNE DEFICIENCY AMONG CHILDREN IN NORTH KERALA — A BUMPY RIDE	Geeta Govindaraj	Government medical college, Kozhikode
62	DRIED BLOOD SPOTS, AN AFFORDABLE TOOL TO COLLECT, SHIP AND SEQUENCE GDNA FROM PATIENTS WITH AN XLA PHENOTYPE RESIDING IN A DEVELOPING COUNTRY	Gesmar Segundo	Universidade Federal de Uberlandia
63	TEN YEAR OLD GIRL WITH PURINE NUCLEOSIDE PHOSPHORYLASE DEFICIENCY	Gretchen Harmon	Thomas Jefferson University Hospital/ Nemours Al duPont Hospital for Children
64	EVALUATION OF PNEUMOCOCCAL SEROTYPE-SPECIFIC ANTIBODY TITERS IN PEDIATRIC PATIENTS WITH RECURRENT SINOPULMONARY INFECTIONS: A PRE AND POST BOOSTER VACCINATION ASSESSMENT AND ITS CLINICAL CORRELATION	Hanadys Ale	Nicklaus Children's Hospital
65	INTERFERON GAMMA (ACTIMMUNE®) EFFECTS ON SEVERE BURKHOLDERIA CEPACIA PNEUMONIA IN VARIANT X-LINKED CHRONIC GRANULOMATOUS DISEASE	Harry Hill	University of Utah
66	ABERRANT INNATE-LIKE LYMPHOCYTES CAUSING ATOPY AND IMMUNE DYSREGULATION IN A PATIENT WITH A NOVEL BCL11B VARIANT	Henry Lu	The University of British Columbia
67	FRACTIONAL EXHALED NITRIC OXIDE MEASUREMENTS IN COMMON VARIABLE IMMUNODEFICIENCY PATIENTS WITH CHRONIC LUNG DISEASE	Hsi-en Ho	Mount Sinai School of Medicine
68	PIK3CD MUTATION IN A PATIENT WITH COMMON VARIABLE IMMUNODEFICIENCY	Ileana Moreira	Centro de Inmunología Clínica
69	EVALUATION OF CD4-CD8-TCRAB+ T LIMPHOCYTES IN A PEDIATRIC AGE PATIENT DIAGNOSED AS EVANS-FISHER SYNDROME.	Imilla Casado	Instituto de Hematología e Inmunología
70	A CASE OF HYPER-IGE SYNDROME WITH NOVEL VARIANTS IN DOCK8 GENE	Jamie Rosenthal	University of Washington
71	PLCG2 GENE CALCIUM-BINDING C2 DOMAIN VARIANT RESULTS IN AUTOINFLAMMATION AND PHOSPHOLIPASE C-GAMMA-2-ASSOCIATED ANTIBODY DEFICIENCY AND IMMUNE DYSREGULATION PHENOTYPE	Jay A. Read	University of Michigan Pediatrics and Communicable Diseases
72	ASSESSMENT OF CALCIUM RESPONSE IN A NON-PHENOTYPIC ADULT PATIENT HETEROZYGOUS FOR A PURPORTED PATHOGENIC MUTATION IN ORAI1	Jay Jin	Mayo Clinic
73	NOVEL MUTATION IN RASGRP1 PRESENTING WITH EBV-DRIVEN LYMPHOPROLIFERATIVE DISEASE AND COMBINED IMMUNODEFICIENCY	Jay Patel	University of Washington
74	UTILITY OF A SECOND T-CELL RECEPTOR EXCISION CIRCLE (TREC) SCREEN TO DETECT T-CELL LYMPHOPENIA AND SEVERE COMBINED IMMUNODEFICIENCY (SCID)	Jay Patel	University of Washington
75	A CASE OF COMPLETE STAT1 LOSS OF FUNCTION	Jenna Bergerson	NIH/NIAID/LCIM
76	EXPANDED GENETIC TESTING FOR PRIMARY IMMUNODEFICIENCIES: FINDINGS FROM A 207-GENE NEXT-GENERATION SEQUENCING PANEL	Jennifer Holle	Invitae
77	HEMATOPOIETIC STEM CELL TRANSPLANTATION IN PATIENTS WITH PRIMARY IMMUNE REGULATORY DISORDERS: A PRIMARY IMMUNE DEFICIENCY TREATMENT CONSORTIUM (PIDTC) AND INBORN ERRORS WORKING PARTY (IEWP) STUDY	Jennifer Leiding	University of South Florida
78	UNMANIPULATED MATCHED SIBLING DONOR HEMATOPOIETIC CELL TRANSPLANTATION (HCT) IN AN INFANT WITH SCID CAUSED BY TBX1 MUTATION AS A LIFE SAVING THERAPY — A CLINICAL UPDATE	Jennifer Leiding	University of South Florida

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79	NOVEL PRESENTATION OF IMMUNODEFICIENCY-CENTROMERIC- INSTABILITY-FACIAL ANOMALY SYNDROME 4: CD8 T CELL LYMPHOPENIA, NEUROBLASTOMA, AND NEUTROPENIA	Jennifer Miller	Baylor College of Medicine
80	A CASE OF IGM DEFICIENCY AND ADULT-ONSET STILL'S DISEASE	Jessica Oh	Case Western/University Hospitals Cleveland Medical Center
81	MEASUREMENT OF ENDOTHELIAL ADHESION MARKERS AS BIOMARKERS OF INFLAMMATION IN PATIENTS WITH CHRONIC GRANULOMATOUS DISEASE	Jessica Trotter	University of South Florida
82	CLINICAL FEATURES AND GENETIC ANALYSIS OF 47 CHINESE PATIENTS WITH X-LINKED HYPER-IGM SYNDROME	Jing Wu	Shanghai Children's Medical Center
83	IGG4-RELATED DISEASE CONCOMITANT WITH HUMORAL IMMUNODEFICIENCY	Joao Pedro Lopes	Case Western Reserve University, UH University Hospitals Cleveland Medical Center
84	SUCCESSFUL USE OF ABATACEPT TO TREAT SEVERE AUTOIMMUNE ENTEROPATHY IN PATIENTS WITH COMBINED IMMUNE DEFICIENCY.	Jocelyn Farmer	Massachusetts General Hospital
85	LEUKOCYTE ADHESION DEFICIENCY-I (LAD-I): A COMPREHENSIVE REVIEW OF ALL PUBLISHED CASES 1975-2017	Jonathan Schwartz	Rocket Pharma
86	PRIMARY CUTANEOUS ACTINOMYCOSIS CAUSED BY SACHAROPOLYSPORA SP. IN A PATIENT UNDER ANTI-TNF-ALPHA THERAPY	Jose Marcos Cunha	Federal University of Rio de Janeiro
87	THE UNDERLYING PRIMARY IMMUNODEFICIENCIES AND LUNG DISEASES, AND LOW CD3 AND CD4 COUNTS ARE ASSOCIATED WITH RECURRENT PNEUMONIA IN HIV NEGATIVE LYMPHOPENIA PATIENTS.	Junghee Shin	Yale University School of Medicine
88	A NOVEL MUTATION IN THE INHIBITOR OF NUCLEAR FACTOR KAPPA-B KINASE SUBUNIT BETA (IKKB) IN AN ADULT MALE WITH ANHYDROTIC ECTODERMAL DYSPLASIA WITH IMMUNODEFICIENCY	Kanao Otsu	National Jewish Health
89	A NOVEL STAT1 GAIN-OF-FUNCTION MUTATION IN AN INFANT WITH MUCOCUTANEOUS CANDIDIASIS, RECTOLABIAL FISTULA, AND ENTEROPATHY	Karen Acker	Columbia/New York Presbyterian
90	NAPDH OXIDASE-SPECIFIC FLOW CYTOMETRY ALLOWS FOR RAPID GENETIC TRIAGE AND CLASSIFICATION OF NOVEL VARIANTS IN CHRONIC GRANULOMATOUS DISEASE.	Keith Sacco	Mayo Clinic Florida
91	ANALYTIC VALIDATION OF OLIGONUCLEOTIDE-SELECTIVE SEQUENCING PANELS FOR CLINICAL DIAGNOSTICS OF PRIMARY IMMUNODEFICIENCIES	Kim Gall	Blueprint Genetics
92	X-LINKED SEVERE COMBINED IMMUNODEFICIENCY WITH PERMISSIVE LYMPHOCYTE NITOGEN PROLIFERATION: A DIAGNOSTIC DILEMMA	Kristen Barbieri	Children's National Health System
93	DIAGNOSTIC YIELD OF BRONCHOALVEOLAR LAVAGE IN PATIENTS WITH PRIMARY IMMUNODEFICIENCY WITH SUSPECTED PULMONARY INFECTION: A SINGLE CENTER EXPERIENCE.	Lauren Sanchez	University of California, San Francisco
94	EXPERIENCES OF PARENTS OF PATIENTS WITH SEVERE COMBINED IMMUNODEFICIENCY DISEASE (SCID) IDENTIFIED BY NEWBORN SCREENING: A QUALITATIVE STUDY	Lauren Sanchez	University of California, San Francisco
95	PROPERDIN DEFICIENCY IN A CHILD PRESENTING WITH RECURRENT LOWER RESPIRATORY TRACT INFECTIONS.	Leen Moens	KU Leuven



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96	CORRELATION BETWEEN PERCENTAGE OF B CELLS/B CELL SUBSETS AND PNEUMOCOCCAL IGG, IGA AND IGM CONCENTRATIONS	Leigh Williams	The Binding Site Group Ltd
97	WHOLE EXOME SEQUENCING: DIGGING DEEPER TO UNCOVER A DIAGNOSIS	Lisa Kobrynski	Emory University School of Medicine
98	CHRONIC EBV INFECTION AS THE SOLE MANIFESTATION OF A NOVEL HOMOZYGOUS SPLICE SITE MUTATION IN THE CD3Δ GENE	Lorena Botero Calderon	Cincinnati Children's Hospital Medical Center
99	PIK3R1 MUTATION IN MOTHER AND CHILD WITH DISSEMINATED AND CONGENITAL TOXOPLASMOSIS	Luigi Notarangelo	National Institute of Allergy and Infectious Diseases
100	A DECADE OF DISSEMINATED ABSCESSES DUE TO MYCOPLASMA FAUCIUM IN A PATIENT WITH ACTIVATED PI3KΔ SYNDROME 2 (APDS2)	Luis Gonzalez-Granado	Hospital 12 de Octubre
101	GENOME EDITING OF LONG-TERM HUMAN HEMATOPOIETIC STEM CELLS FOR X-LINKED SEVERE COMBINED IMMUNODEFICIENCY	Mara Pavel-Dinu	Stanford University
102	HETEROZYGOUS TRUNCATING VARIANTS IN POMP THAT ESCAPE NONSENSE-MEDIATED DECAY AND CAUSE A UNIQUE IMMUNE DYSREGULATORY SYNDROME	Maria Cecilia Poli	Baylor College of Medicine
103	SEASONAL INFLUENZA VACCINATION AMONG PERSONS WITH PRIMARY IMMUNODEFICIENCY	Mark Ballow	University of South Florida
104	NO CLINICAL SIGNS OF HYPER-IGM OR OTHER RELEVANT PRIMARY IMMUNODEFICIENCY SYNDROME IN NOVEL PATIENTS WITH CONSTITUTIONAL MISMATCH REPAIR DEFICIENCY (CMMRD)	Markus Seidel	Division of Pediatric Hematology and Oncology, Department of Pediatrics and Adolescent Medicine, Medical University Graz
105	STRATIFICATION OF PRIMARY IMMUNODEFICIENCY PATIENTS USING VACCINE RESPONSE AND IGG SUBCLASS MEASUREMENTS REVEALS DIFFERENT FREQUENCIES OF INFECTION	Markus Skold	The Binding Site Group Limited
106	A NOVEL MUTATION IN THE SH2 DOMAIN OF BRUTON'S TYROSINE KINASE LEADING TO X-LINKED AGAMMAGLOBULINEMIA.	Mary Bausch-Jurken	Medical College of Wisconsin
107	IMMUNE DYREGULATION PATTERN OVERLAPPING WITH ALPS IN PATIENTS WITH GAUCHER DISEASE. A SINGLE CENTER ANALYSIS	Maurizio Miano	IRCCS Istituto Giannina Gaslini
108	IMMUNOLOGIC ABNORMALITIES IN GATA2 DEFICIENCY: A CASE REVIEW OF 3 SIBLINGS AND USIDNET REGISTRY COHORT	Megan Ford	Sidney Kimmel Medical College at Thomas Jefferson University/A.I. duPont Hospital for Children
109	PRIMARY IMMUNODEFICIENCY DISEASES IN QATAR: FIRST REPORT FROM THE QATAR NATIONAL PRIMARY IMMUNODEFICIENCY REGISTRY (QNPIDR)	Mehdi Adeli	Sidra Medical / Hamad Medical Corporation
110	SKIN MANIFESTATIONS IN CHILDREN WITH PRIMARY IMMUNODEFICIENCY DISEASES IN QATAR	Mehdi Adeli	Sidra Medical / Hamad Medical Corporation
111	SKIN ULCERS LEADING TO RESIDUAL HYPO PIGMENTED LESIONS WITH FAILURE TO THRIVE IN ATAXIA TELANGIECTASIA CASE: A CASE REPORT	Mehdi Adeli	Sidra Medical / Hamad Medical Corporation
112	WILL EARLY ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION YIELD BETTER OUTCOMES IN STAT3 DEFICIENT HIES PATIENTS?	Michael Albert	Dr. von Hauner University Children's Hospital
113	MYCOBACTERIA-SPECIFIC T-CELLS CAN BE EXPANDED FROM HEALTHY DONORS AND ARE ABSENT IN PRIMARY IMMUNODEFICIENCY	Michael Keller	Children's National Medical Center
114	NEUTROPHILS DEVELOPMENT AND FUNCTION IN AN ANIMAL MODEL OF ADENOSINE DEAMINASE DEFICIENCY	Michael Tsui	University of Toronto & The Hospital for Sick Children



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115	KABUKI SYNDROME — ANOTHER PLAYER ON THE IMMUNODEFICIENCY STAGE	Michele Pham	Icahn School of Medicine at Mount Sinai
116	SUPPRESSIVE EFFECTS OF SG-SP1 ON MAST CELL-MEDIATED ALLERGIC INFLAMMATION VIA REGULATION OF FCERI SIGNALLING	Min-Jong Kim	Kyungpook National University
117	ESCULETIN FROM FRAXINUS RHYNCHOPHYLLA ATTENUATES DERMATOPHAGOIDES FARINAE EXTRACT /2,4-DINITROCHLOROBENZENE— INDUCED ATOPIC SKIN INFLAMMATION BY INHIBITING EXPRESSION OF INFLAMMATORY CYTOKINES	Na-Hee Jeong	Kyungpook National University
118	LOCATION OF STAT3 HYPER-IGE SYNDROME MUTATIONS DOES NOT INVARIABLY CORRELATE WITH STAT3 PHOSPHORYLATION POTENTIAL	Natalia Chaimowitz	Baylor College of Medicine
119	DIAGNOSTIC VALUE OF AN ENZYME-LINKED IMMUNOSORBENT SPOT (ELISPOT) ASSAY IN THE DETECTION OF SPECIFIC PNEUMOCOCCAL VACCINE RESPONSE IN COMMON VARIABLE IMMUNODEFICIENCY	Neema Izadi	National Jewish Health / University of Colorado
120	PURINE NUCLEOSIDE PHOSPHORYLASE DEFICIENCY IN THREE ADULTS WITH RECURRENT INFECTIONS	Nicholas Campbell	СНИМ
121	USE OF THE SPIRIT ANALYZER TO DETECT PATIENTS AT RISK FOR PRIMARY IMMUNODEFICIENCY FROM WITHIN A LARGE PEDIATRIC HEALTH PLAN.	Nicholas Rider	Baylor College of Medicine
122	BIOCHEMICAL CHARACTERIZATION, PATHOGEN SAFETY AND STABILITY OF OCTANORM, A NEW 16.5 % SUBCUTANEOUS IMMUNE GLOBULIN PRODUCT	Nicola Gelbmann	Octapharma Pharmazeutika Produktionsges. m.b.H.
123	A SECOND IMMUNOCOMPROMISED PATIENT WITH DNA LIGASE I DEFICIENCY	Niraj Patel	Levine Children's Hospital, Carolinas Medical Center
124	SAFETY AND EFFICACY OF HIZENTRA® IN PEDIATRIC HEMATOPOIETIC STEM CELL RECIPIENTS	Niraj Patel	Levine Children's Hospital, Carolinas Medical Center
125	HETEROZYGOUS PATHOGENIC TNFRSF13B (TACI) VARIANT IN A PATIENT WITH PEDIATRIC ONSET, DIFFICULT-TO-TREAT INFLAMMATORY BOWEL DISEASE	Njeri Maina	UAB
126	ADHERENCE TO IMMUNIZATION AS PART OF STANDARD CARE OF ADULT PATIENTS WITH DIABETES MELLITUS	Nouf Hamid	Imam Abdulrahman Bin Faisal university
127	SUBCUTANEOUS IMMUNOGLOBULIN THERAPY WITH HIZENTRA® IN PATIENTS WITH STIFF PERSON SYNDROME	Olivia Francis	Carolinas Medical Center, Levine Children's Hospital
128	REFRACTORY THROMBOCYTOPENIA IN A PATIENT WITH WISKOTT- ALDRICH SYNDROME DESPITE HEMATOPOIETIC STEM CELL TRANSPLANTATION: ELTROMBOPAG AS A THERAPEUTIC OPTION.	Oscar Correa-Jimenez	Universidad Nacional de Colombia
129	PATIENTS WITH CD3G MUTATIONS REVEAL A ROLE FOR HUMAN CD3G IN TREG DIVERSITY AND SUPPRESSIVE FUNCTION.	Ottavia Delmonte	NIH, NIAID, LCIM
130	FIRST REPORT OF A PAPULOPUSTULAR DERMATITIS AS THE PRESENTING FEATURE OF CHRONIC GRANULOMATOUS DISEASE IN TWO INFANTS AT 8 MONTHS AND 14 MONTHS	Puja Rajani	University of Rochester Medical Center
131	EARLY POST-NATAL THYMUS DEVELOPMENT IS STRICTLY DEPENDENT ON THE LEVEL OF FOXN1 EXPRESSION IN TEC	Yasuhiro Yamazaki	NIAID, NIH
132	FOXN1 HAPLOINSUFFICIENCY LEADS TO DEFECTIVE THYMIC DEVELOPMENT EARLY IN LIFE — IMPLICATIONS FOR INTERPRETATION OF NEWBORN SCREENING FOR SCID	Yasuhiro Yamazaki	National Institute of Allergy and Infectious Diseases, NIH



POSTER	TITLE	NAME	ORGANIZATION
133	CLINICAL CHARACTERISTICS AND GENETIC PROFILES OF 40 PATIENTS WITH WISKOTT-ALDRICH SYNDROME (2004-2016): A SINGLE CENTER EXPERIENCE IN CHINA	Ying-Ying Jin	Shanghai Children's Medical Center
134	HIGH DOSE IMMUNOGLOBULIN TREATMENT OPTIONS FOR CHRONIC PARVOVIRUS VIREMIA IN IMMUNOSUPPRESSED AND THYMECTOMIZED PEDIATRIC HEART TRANSPLANT PATIENTS IN A TERTIARY CARE CENTER	Rachel Cruz	University of South Florida
135	A RAPID FLOW CYTOMETRIC ANALYSIS OF DNA REPAIR PROTEINS REVEALS A RADIOSENSITIVE PHENOTYPE IN BCL11B DEFICIENCY ASSOCIATED WITH SEVERE COMBINED IMMUNODEFICIENCY (SCID).	Rae Brager	McMaster University Medical Centre
136	DOES THYMECTOMY DURING CARDIAC SURGERY AFFECT TREC LEVELS AND INFECTION RISK?	Rebecca Koransky	New York - Presbyterian/Columbia University Medical Center
137	PREVALENCE OF AUTOIMMUNITY IN IRAMAN PATIENTS WITH COMMON VARIABLE IMMUNION (CENT - (CVID)	Reza Yazdani	Research Center for Immunodeficiencies (RCID)
138	INCLUSION BODY MYOSITIS AS A COMPLICATION OF COMMON VARIABLE IMMUNODEFICIENCY	Robert Tamayev	Montefiore Medical Center
139	IF YOU DO NOT THINK OF IT, YOU WILL NOT LOOK FOR IT, GATA2 MUTATION DIAGNOSIS TRIGGERED BY IMMUNOHEMATOLOGICAL PROFILE	Rofida Nofal	UCSF Benioff Children's Hospital
140	PHARMACOKINETICS, EFFICACY, TOLERABILITY AND SAFETY OF A NEW SUBCUTANEOUS HUMAN IMMUNOGLOBULIN 16.5% IN PRIMARY IMMUNE DEFICIENCY	Roger Kobayashi	Octapharma
141	NEW DIAGNOSIS OF COMBINED IMMUNE DEFICIENCY IN A 10-YEAR-OLD FEMALE WITH FANCONI ANEMIA DUE TO FANCD2 GENE DELETION.	Roman Deniskin	Baylor College Of Medicine
142	PERSISTENT HYPOGAMMAGLOBULINEMIA FOLLOWING RITUXIMAB TREATMENT IN PEDIATRIC PATIENTS	Roxane Labrosse	Department of Pediatrics, Allergy, Immunology and Rheumatology Division, University of Montreal, Quebec, Canada
143	HYPEREOSINOPHILIA, EOSINOPHILIC GASTROENTERITIS, AND EXOCRINE PANCREATIC INSUFFICIENCY AS UNIQUE MANIFESTATIONS OF CYTOTOXIC T LYMPHOCYTE ANTIGEN 4 HAPLOINSUFFICIENCY.	Ryan Israelsen	Children's Hospital Colorado
144	HIGHLY ACCURATE WISKOTT-ALDRICH SYNDROME DIAGNOSIS VIA RAPID FLOW-BASED WAS PROTEIN STAINING	Samuel Chiang	Cancer and Blood Diseases Institute
145	AUTOIMMUNITY AND RHEUMATOLOGIC COMPLICATIONS IN PATIENTS WITH COMMON VARIABLE IMMUNODEFICIENCY (CVID)	Sara Barmettler	Massachusetts General Hospital
146	DUAL CANCER IN A PATIENT WITH ZNF341 DEFICIENCY	Sara Kilic	Uludag University Faculty of Medicine
147	THE EVALUATION OF MALIGNANCIES IN TURKISH PID PATIENTS; A MULTICENTER STUDY	Sara Kilic	Uludag University Faculty of Medicine
148	DIAGNOSIS OF PRIMARY IMMUNODEFICIENCY DISEASE USING PNEUMOCOCCAL AVIDITY ASSAY: INTERPRETATION AND CLINICAL OUTCOMES	Sara Intner Niraj Patel	Levine Children's Hospital, Carolinas Medical Center
149	EFFICACY, SAFETY, AND TOLERABILITY OF PROMETIC'S IMMUNE GLOBULIN INTRAVENOUS (HUMAN) 10% (PROMETIC 10% IGIV) IN ADULT AND PEDIATRIC SUBJECTS WITH PRIMARY IMMUNODEFICIENCY DISEASES (PIDD)	Joseph Parker	Prometic Biotherapeutics Inc.

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150	REDUCED INTENSITY CONDITIONING ALLOGENEIC HCT WITH ALEMTUZUMAB, FLUDARABINE AND MELPHALAN: PREFERRED HCT APPROACH FOR SCID DUE TO CARTILAGE HAIR HYPOPLASIA IN THE ERA OF NEWBORN SCREENING?	Sharat Chandra	Cincinnati Children's Hospital Medical Center
151	EPIGENETIC CHANGES IN IMMUNE CELLS FOLLOWING SUCCESSFUL DESENSITIZATION WITH MULTI-FOOD ALLERGEN ORAL IMMUNOTHERAPY	Sharon Chinthrajah	Stanford University
152	LYMPHOCYTE REFERENCE VALUES FOR ARAB CHILDREN	Suleiman Al-Hammadi	CMHS, UAEU
153	A COMPARISON OF IMMUNE RECONSTITUTION FOLLOWING HUMAN PLACENTA-DERIVED STEM CELLS (HPDSC) WITH UMBILICAL CORD BLOOD TRANSPLANTATION (UCBT) VS. UCBT ALONE IN PEDIATRIC RECIPIENTS WITH MALIGNANT AND NON-MALIGNANT DISEASES	Sumeet Sandhu	Maria Fareri Children's Hospital at Westchester Medical Center
154	NEW DIAGNOSIS OF FAMILIAL HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS TYPE 2 IN ADOLESCENT PRESENTING WITH ACUTE LOWER EXTREMITY PARALYSIS	Sumeet Sandhu	Maria Fareri Children's Hospital at Westchester Medical Center
155	CD40 LIGAND DEFICIENCY CAUSES FUNCTIONAL DEFECTS OF PERIPHERAL NEUTROPHILS THAT ARE IMPROVED BY EXOGENOUS IFN-F	Tábata França	University of São Paulo
156	CONCOMITANT OPV AND BCG VACCINE DERIVED COMPLICATIONS IN TWO INFANTS WITH SEVERE COMBINED IMMUNODEFICIENCY	Tali Stauber	Safra Children`S Hospital, Seba Medical Center
157	FUNCTIONAL EVALUATION OF A NOVEL HOMOZYGOUS VARIANT IN CASPASE RECRUITMENT DOMAIN FAMILY MEMBER 11 (CARD11)	Tamar Rubin	University of Manitoba
158	NEWBORN SCREENING FOR IKBKB SEVERE COMBINED IMMUNE DEFICIENCY USING GENETIC MUTATION ANALYSIS	Tamar Rubin	University of Manitoba
159	RAS-ASSOCIATED AUTOIMMUNE LEUKOPROLIFERATIVE DISORDER IN A 4 MONTH-OLD MALE INFANT	Tehila Saadia	SUNY Downstate Medical Center
160	A NOVEL IFNGR1 MUTATION LEADING TO INTERFERON-GAMMA RECEPTOR 1 DEFICIENCY TREATED SUCCESSFULLY WITH UMBILICAL CORD BLOOD TRANSPLANTATION	Thomas Michniacki	University of Michigan
161	INCIDENCE OF HERPES ZOSTER (SHINGLES) VACCINATION AND DIAGNOSIS AMONG OLDER PERSONS WITH PRIMARY IMMUNODEFICIENCY	Tiffany Henderson	Immune Deficiency Foundation
162	XIAP DEFICIENCY CAUSING RECALCITRANT INFLAMMATORY BOWEL DISEASE WITH IMMUNE DYSREGULATION	Tiffany Jean	Kaiser Permanente Los Angeles Medical Center
163	TWO YEARS OF SUCCESS — THE ISRAELI NEWBORN SCREENING PROGRAM FOR SEVERE COMBINED IMMUNODEFICIENCY (SCID)	Raz Somech	Edmond and Lily Safra Children's Hospital, Sheba Medical Center, Tel Hashomer
164	NOVEL EPIGENETIC IMMUNE CELL QUANTIFICATION SUITABLE FOR PRIMARY IMMUNE DEFICIENCIES AND IMMUNDYSREGULATORY DISORDERS	Janika Schulze	Stanford University School of Medicine
165	CHRONIC GRANULOMATOUS DISEASE, ORNITHINE TRANSCARBAMYLASE DEFICIENCY AND X-INACTIVATION	Christa Zerbe	The National Institutes of Health
166	DARATUMUMAB CONTROLS LIFE-THREATENING POST-HSCT AUTOIMMUNE HAEMOLYTIC ANAEMIA	Catharina Schuetz	Ulm University Medical Center, Pediatrics
167	PANCYTOPENIA AND IMMUNODEFICIENCY WITH MDS IN AN INFANT DUE TO SAMD9L MUTATION	Blachy Davila Saldana	Children's National Medical Center



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168	MODELLING HUMAN IMMUNE DEFICIENCY FROM NOVEL MISSENSE MUTATIONS WITH ORTHOLOGOUS HETEROZYGOUS MUTATIONS ENGINEERED IN MICE BY CRISPR/CAS9	Bahar Miraghazadeh	John Curtin School Medical Research and Translational research Unit
169	PRIMARY IMMUNE DEFICIENCY DISEASE IN PATIENTS OVER AGE 60: AN ANALYSIS FROM A PROPRIETARY IMMUNOLOGY PATIENT REGISTRY	Roger Kobayashi	UCLA School of Medicine
170	CMV, EBV AND HHV-6 OUTCOMES IN HEMATOPOIETIC STEM CELL TRANSPLANTATION (HSCT) FOR PRIMARY IMMUNODEFICIENCY	Sneha Suresh	University of Toronto
171	CHARACTERIZATION AND SUCCESSFUL TREATMENT OF A NOVEL AUTOSOMAL DOMINANT IMMUNE DYSREGULATORY SYNDROME CAUSED BY A JAK1 GAIN-OF-FUNCTION MUTATION.	Stuart Turvey	The University of British Columbia
172	IGG4 RELATED DISEASE (IGG4RD) IN AN ADOLESCENT MALE MISDIAGNOSED AS AUTOIMMUNE LYMPHOPROLIFERATIVE SYNDROME	Vincent Bonagura	NorthWell Health
173	SURVEY OF CANADIAN PATIENTS WITH PRIMARY IMMUNODEFICIENCY	Whitney Goulstone	Canadian Immunodeficiencies Patient Organization
174	THE EVOLVING PHENOTYPES OF FORKHEAD BOX P3 MUTATIONS	Timothy Chow	University of Texas Southwestern Children's Medical Center
175	DEFECTIVE B CELL PROLIFERATION AND ACTIVATION IN RESPONSE TO TLR7/9 AGONIST STIMULATION IN B CELLS FROM AD-HIES PATIENTS	Tong-Xin Chen	Shanghai Children's Medical Center
176	THE CLINICAL, LABORATORY, MOLECULAR CHARACTERISTICS AND REMISSION STATUS IN CHILDREN WITH SEVERE CONGENITAL NEUTROPENIA AND SEVERE IDIOPATHIC NEUTROPENIA	Tong-Xin Chen	Shanghai Children's Medical Center
177	THE PLASMA CONTACT SYSTEM AND ITS ROLE IN COMMON VARIABLE IMMUNODEFICIENCY: AN EXPLORATIVE STUDY.	Tukisa Smith	Icahn School of Medicine at Mount Sinai
178	MULTILINEAGE CYTOPENIAS IN CTLA4 DEFICIENCY DUE TO AUTOIMMUNE DESTRUCTION: A RETROSPECTIVE REVIEW	V. Koneti Rao	National Institute of Health
179	HIGH THROUGHPUT TRIPLEX TREC, KREC, RNASEP ASSAY IN NEWBORN SCREENING IN NEW YORK STATE	Vincent Bonagura	Northwell Health
180	PROGRESSIVE HYPOGAMMAGLOBULINEMIA WITH T CELL ABNORMALITIES IN TWO ADULT FEMALES WITH INFECTIONS AND AUTOIMMUNITY: A DIAGNOSTIC DILEMMA	Warit Jithpratuck	University of South Florida Allergy and Immunology
181	PRESENT A CASE.NON-CELIAC GLUTEN SENSITIVITY IS AN EMERGING ENTITY WITH SYMPTOMS SIMILAR TO CELIAC DISEASE, BUT WITHOUT POSITIVITY IN SPECIFIC DIAGNOSTIC TESTS. IT IS CONSIDERED MORE COMMON THAN CELIAC DISEASE	William Marquez	Fundacion Hospital de la Misericordia
182	ADA2 DEFICIENCY: CASE REPORT OF A RARE PHENOTYPE WITH ALPS AND CVID-LIKE PRESENTATION	Yenhui Chang	Johns Hopkins All Children's Hospital
183	AUTOANTIBODIES TO INTERFERON-F IN A PATIENT WITH TREATMENT RESISTANT MYCOBACTERIAL INFECTION AND AUTOIMMUNITY	Zoya Treyster	School of Medicine at Hofstra/Northwell, Department of Allergy and Immunology
184	DAPSONE IN THE MANAGEMENT OF RECURRENT SKIN ABSCESSES IN CHILD WITH CYTOKINESIS 8 (DOCK8) MUTATION.	Zoya Treyster	School of Medicine at Hofstra/Northwell, Department of Allergy and Immunology
185	A CASE OF CANDLE SYNDROME	Tiphanie Vogel	Baylor College of Medicine
186	REVERSIBLE SYMPTOMATIC PANHYPOGAMMAGLOBULINEMIA SECONDARY TO LAMOTRIGINE	ErinMarie Kimbrough	Mayo Clinic Florida



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187	A CASE OF X-LINKED LYMPHOPROLIFERATIVE SYNDROME TYPE 2 WITH CD4 LYMPHOCYTOPENIA AND B CELL SUBSET ABNORMALITIES IN A 26 YEAR OLD MALE WITH ULCERATIVE COLITIS	Erin Reigh	Dartmouth-Hitchcock Medical Center
188	GATA2 DEFICIENCY WITH MUTATION C.1061C>T P.(THR354MET) IN A BRAZILIAN PATIENT	Natasha Ferraroni	Centro Universitário de Brasília - UniCEUB
189	A CASE OF GOOD SYNDROME WITH AUTOIMMUNE COMPLICATIONS AND LARGE GRANULAR LYMPHOCYTIC LEUKEMIA	Farnaz Tabatabaian	University of South Florida
190	CHARACTERIZATION OF PATIENTS AND CARRIERS OF p47phox CHRONIC GRANULOMATOUS DISEASE BY FLOW CYTOMETRIC ANALYSIS OF p47phox EXPRESSION AND DROPLET DIGITAL PCR ANALYSIS OF NCF1	Douglas Kuhns	Leidos Biomedical Research, Inc.
191	EVALUATION FREQUENCY AND METHODOLOGY OF COMMON VARIABLE IMMUNODEFICIENCY IN PATIENTS WITH IMMUNE THROMBOCYTOPENIC PURPURA AT A LARGE ACADEMIC MEDICAL CENTER	Shyam Joshi	University of Texas Southwestern

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