2014 Annual Meeting Program Committee

Co-Chairs
Charlotte Cunningham-Rundles, MD PhD
Mount Sinai School of Medicine
New York, NY

Kathleen Sullivan, MD PhD
Children’s Hospital of Philadelphia
Philadelphia, PA

Committee:
Francisco A. Bonilla, MD PhD
Children’s Hospital Boston
Boston, MA

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Montreal, CANADA

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NIAID, NIH
Bethesda, MD

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Children’s Hospital Boston, Harvard Medical School
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Milwaukee, WI

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Plymouth, MN

Troy R. Torgerson, MD PhD
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Seattle, WA

Burcin Uygungil, MD MPH
Children’s National Health System
Washington, DC

James Verbsky, MD PhD
Medical College of Wisconsin
Milwaukee, WI

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About the Clinical Immunology Society
The Clinical Immunology Society (CIS), established in 1986, 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. CIS is an international professional organization which includes more than 700 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.

Connect With Your Colleagues!
“LIKE” CIS on Facebook
Follow us on Twitter @CLINIMMMSOC
Join our Group on LinkedIn
Dear Colleagues,

On behalf of the Clinical Immunology Society (CIS), thank you for participating in the 2014 Annual Meeting: Primary Immune Deficiency Diseases North American Conference taking place April 10-13, 2014 at the Hilton Baltimore in Baltimore, Maryland.

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 2014 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!

John M. Routes, MD  
2013-2014 CIS President
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 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.

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

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.
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 Baltimore.

Hilton Baltimore
401 W Pratt St, Baltimore, MD 21201
P: (443) 573-8700

Registration Desk
Hilton Baltimore ~ 2nd Floor, Key Ballroom South Foyer

Registration Desk Hours
Wednesday, April 9  4:00pm – 7:00pm
Thursday, April 10  7:00am – 7:00pm
Friday, April 11  7:00am – 6:00pm
Saturday, April 12  7:00am – 6:00pm
Sunday, April 13  7:30am – 12:00pm

Exhibit Hall
Hilton Baltimore ~ 2nd Floor, Key Ballroom 8-12

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
Wednesday, April 9th  2:00pm – 7:00pm
Thursday, April 10th  8:00am – 10:00am

Exhibit Hours
Thursday, April 10th  11:00am – 1:00pm
 7:00pm – 8:30pm
Friday, April 11th  11:00am – 1:00pm
Saturday, April 12th  11:30am – 1:30pm
 6:00pm – 7:30pm

Exhibitor Move-Out
Saturday, April 12th  7:30pm – 9:00pm
Sunday, April 13th  8:00am – 11:00am

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 and hors d’oeuvres and an open bar are available during the evening poster session hours.

Publishing of Abstracts
The abstracts submitted to the 2014 Annual Meeting are published in the April issue of Journal of Clinical Immunology, the official journal of the Clinical Immunology Society.

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 2014 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!

NIT/FIT Lounge-New this Year!
The members of the CIS New-Immunologists-in-Training / Fellows-in-Training (NIT / FIT) are invited to visit the NIT/FIT Lounge throughout the conference. This area has been created to give NIT/FIT’s a place they can go to network with each other. This area is located in the Exhibit Hall and can be utilized anytime between Thursday, April 10th 11:00am – Saturday, April 12th 7:30pm.

This year Fellows that were selected to present their submitted abstracts orally at the Annual Meeting will receive travel grants. These Travel Grants have been made possible through the support of the Immune Deficiency Foundation. The following fellows traveling to Baltimore are being awarded travel grants:
Caroline Y. Kuo, David Geffen School of Medicine at UCLA
Cinzia Milito, Sapienza University of Rome, Italy
Elena Hsieh, Stanford University
Jean Jacques De Bruycker, CHU Sainte-Justine, University of Montreal, Canada
Kerstin Felgentreff, Division of Immunology, Boston Children’s Hospital, Harvard Medical School
Merin Kuruvilla, UT Southwestern Medical Center
Niti Chokshi, Baylor College of Medicine
Solrun Melkorka Maggadottir, Children’s Hospital of Philadelphia

Immunodeficiency Foundation
Continuing Medical Education Information

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

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
Provide advanced training for physicians and researchers working in the field of primary immune deficiency that covers diagnosis, therapy and future trends related to the care of patients with primary immune deficiency.
• Facilitate interactions among clinicians of diverse training to promote multicenter clinical trials and to coordinate participation in existing clinical trials.
• Improve recognition of primary immune deficiencies.
• Improve understanding of the diagnostic issues and the pathophysiology of primary immune deficiencies.
• Improve understanding of the appropriate interventions for these diseases.

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 19.5 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://www.clinimmmsoc.org/cme/am14

2014 Annual Meeting Program Committee and Speaker Disclosures

Catherine M. Bollard, MD
The George Washington University Children’s National Health System
There are no relationships to disclose.

Vincent R. Bonagura, MD FAAAAI
Alexandra & Steven Cohen Children’s Medical Center
CSL Behring PID Committee member advisory committee receiving honorarium
Baxter-Speaking and teaching receiving honorarium

Francisco A. Bonilla, MD PhD
Children’s Hospital Boston
CSL Behring-Consultant receiving Consulting fee
UpToDate in Medicine-author receiving Royalty
Octapharma-data safety monitor receiving Honoraria

Sarah K. Browne, MD
NIH/NIAID
There are no relationships to disclose.

Niti Y. Chokshi, MD
Baylor College of Medicine
There are no relationships to disclose.

Mary Ellen Conley, MD
LeBonheur Children’s Hospital
There are no relationships to disclose.

Charlotte Cunningham-Rundles, MD PhD
Mt. Sinai Medical Center
Baxter-Medical Advisory Board receiving Consulting fee
CSL Behring-Medical Advisory Board receiving Consulting fee
Biotest-Medical Advisory Board receiving Consulting fee

Jean Jacques De Bruycker, MD
Sainte-Justine Hospital
There are no relationships to disclose.

Carla M. Duff, ARNP
University of South Florida
CSL Behring-Nurse consultant receiving Consulting fee.
Baxter-Advisory Board member receiving Consulting fee.

Kerstin Felgentreff, MD
Boston Children’s Hospital
There are no relationships to disclose.

Thomas A. Fleisher, MD
National Institutes of Health
Elsevier-Co-editor of the textbook Clinical Immunology: Principles and Practice receiving Royalty
Georgia Regents University College of Medicine-Teaching program receiving Honorarium

Alexandra F. Freeman, MD
NIH NIAID
There are no relationships to disclose.

Raphaela Goldbach-Mansky, MD
NIAMS, NIH
Study support from SOBI, Novartis, Regeneron, Eli Lily.
Anete Sevciovic Grumach, MD PhD
University of São Paulo Medical School
Shire-Membership on advisory board and speaker receiving consulting fee
CSL Behring-Consulting receiving support for Medical Education

Elie Haddad, MD PhD
CHU Ste-Justine, University of Montreal
CSL Behring-receiving Investigator initiated trial funds.

Sophie Hambleton, MD PhD
Newcastle University
There are no relationships to disclose.

Mary Hintermeyer, APNP
Children’s Hospital of Wisconsin
There are no relationships to disclose.

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

Joyce T. Hsu, MD
Children's Hospital Boston
There are no relationships to disclose.

Artemio M. Jongco, MPH MD PhD
Hofstra - North Shore LIJ School of Medicine
There are no relationships to disclose.

Michael B. Jordan, MD
Cincinnati Children's Hospital Medical Center
There are no relationships to disclose.

Carl H. June, MD
University of Pennsylvania
Novartis-Consulting receiving intellectual property licensed to Novartis-Speaker entitled to royalties from the University of Pennsylvania

Lloyd H. Kasper, MD
Dartmouth Medical School
There were no relationships reported at time of print of the final program.

Caroline Kuo, MD
UCLA Medical Center
There are no relationships to disclose.

Merin E. Kuruvilla, MD
UTSW Medical Center
There are no relationships to disclose.

Ian T. Lamborn, BSc
National Institutes of Allergy & Infectious Diseases
There are no relationships to disclose.

Yu-lung Lau, MBChB, MD
The University of Hong Kong
There are no relationships to disclose.

Howard M. Lederman, MD PhD
Johns Hopkins Hospital
There were no relationships reported at time of print of the final program.

Patricia Lugar, MD
Duke University Medical Center
There are no relationships to disclose.

James R. Lupski, MD PhD
Baylor College of Medicine
Ion Torrent Systems Inc. - Former Scientific Advisory Board Member receiving Stocks
23andMe - Former Scientific Advisory Board Member receiving Stocks

Jonathan Lyons, MD
NIAID / NIAID
There are no relationships to disclose.

Solrun Melkorka Magnadottir, MD
Children’s Hospital of Philadelphia
There are no relationships to disclose.

Paul J. Maglione, MD PhD
Mount Sinai School of Medicine
There are no relationships to disclose.

Cinzia Milito
Sapienza University of Rome
There are no relationships to disclose.

Talal I. Mousallem, MD
Wake Forest University School of Medicine
There are no relationships to disclose.

Sarah K. Nicholas, MD
Baylor College of Medicine
There are no relationships to disclose.

Luigi D. Notarangelo, MD PhD
Children's Hospital Boston
Harvard Medical School
There are no relationships to disclose.

Javier Ochoa-Reparaz, PhD
Sanford-Burnham Medical Research Institute
There are no relationships to disclose.

Jordan S. Orange, MD PhD
Baylor College of Medicine
There are no relationships to disclose.

Angela Orren, BSc MB ChB MD
Cardiff University and University of Cape Town
There are no relationships to disclose.

Elena E. Perez, MD PhD
University of Miami School of Medicine
Baxter-Consulting receiving consulting fee.
CSL Behring-Consulting receiving consulting fee.

Capucine Picard, MD PhD
Hopital Necker-Enfants Malades
There are no relationships to disclose.

Eckhard R. Podack, MD
University of Miami
Patents through U. Miami-Inventor receiving Intellectual property rights

Matthew Porteus, MD
Stanford School of Medicine
CRISPR Therapeutics-Consulting receiving consulting fee.

Lindsey B. Rosen, BS
NIAID, NIH
There are no relationships to disclose.
2014 Annual Meeting Program Committee and Speaker Disclosures

Sergio D. Rosenzweig, MD PhD
NIAID, NIH
There are no relationships to disclose.

John M. Routes, MD
Medical College of Wisconsin
Baxter Pharmaceuticals-PI receiving PI initiated grant

Alexander Rudensky, PhD
Memorial Sloan-Kettering Institute
There were no relationships reported at time of print of the final program.

Andrew Scharenberg, MD
University of Washington
Cellectis therapeutics-Chief Scientific Officer receiving salary, equity
Pregenex Inc.-Founder, member of board of directors receiving equity

Brahm H. Segal, MD FACP FIDSA
Roswell Park Cancer Institute
There are no relationships to disclose.

Ralph S. Shapiro, MD
Midwest Immunology Clinic
There are no relationships to disclose.

Amos J. Simon
Sheba Medical Center-Tel Hashomer
There are no relationships to disclose.

Scott B. Snapper, MD
Boston Children’s Hospital
There were no relationships reported at time of print of the final program.

Evan Snitkin, PhD
National Human Genome Research Institute
There were no relationships reported at time of print of the final program.

Raz Somech, MD PhD
Safra Children's Hospital-Tel Hashomer, Israel
There are no relationships to disclose.

Helen Su, MD PhD
NIAID/NIH
There are no relationships to disclose.

Kathleen E. Sullivan, MD PhD
Children’s Hospital of Philadelphia
Immune Deficiency Foundation-Consulting receiving Consulting fee
Baxter-Researcher receiving grant money

Stuart G. Tangye, PhD
Garvan Institute of Medical Research
There are no relationships to disclose.

David T. Teachey, MD
Children's Hospital of Philadelphia
There were no relationships reported at time of print of the final program.

Troy R. Torgerson, MD PhD
University of Washington
Baxter Biosciences-Scientific advisory Board/Research fund recipient receiving Consulting fees/Research funds
CSL Behring-Research fund recipient receiving Research funds

Burcin Uygungil, MD MPH
Children's National Health System
There are no relationships to disclose.

Gulbu Uzel, MD
NIH / NIAID
There are no relationships to disclose.

James Verbsky, MD PhD
Medical College of Wisconsin
There were no relationships reported at time of print of the final program.

Donald C. Vinh, MD
McGill University Health Centre
CSL Behring Canada-Speaking and teaching; Membership on advisory committee receiving Unrestricted educational grant; speaker honoraria
Astellas Canada-Independent contractor receiving Research grant

Richard L. Wasserman, MD PhD
Medical City Children’s Hospital
Baxter-Consulting, speaking and teaching, advisory committees, investigator receiving honoraria, consulting fee
CSL Behring-Consulting, speaking and teaching, advisory committees, investigator receiving honoraria, consulting fee
ADMA-Principle investigator receiving consulting fee

Yesim Yilmaz Demirdag, MD
Columbia University Medical Center
There are no relationships to disclose.

M. Elizabeth Younger, CPNP PhD
Johns Hopkins
RMS Medical Products-Advisory Board membership receiving consulting fee
CSL Behring-Independent contractor, consulting, advisory board membership receiving consulting fee, research support
Immune Deficiency Foundation-Chair, Nurse Advisory Committee receiving pro bono

Yu Zhang
National Institutes of Health
There are no relationships to disclose.

Qian Zhang, MD
NIAID, NIH
There are no relationships to disclose.
Networking Opportunities
Networking is essential to building a professional reputation. CIS membership offers a way to establish and maintain both professional and personal contacts within the field of clinical immunology. CIS offers opportunities to serve with colleagues on several committees as well as serve as faculty for meetings and schools.

Publications
CIS membership includes a complimentary online subscription to the Journal of Clinical Immunology, the official journal of CIS. The Journal of Clinical Immunology is an international journal that helps researchers and academic clinicians keep current on investigative basic immunology and diseases related to the immune system.

Learning Opportunities
CIS recognizes the importance of ongoing education in the field of clinical immunology. Annual Meetings are held at varying locations around the United States, and include invited speakers and both oral and poster abstract presentations, as well as opportunities to speak with representatives from leading companies in the field of immunology.

CIS is also proud to host the only meeting in North America that focuses on Primary Immunodeficiency. The primary goal of this biennial national conference is to provide a venue for the presentation of the newest primary immune deficiency diseases and the pathogenesis of these defects in molecular terms. Another goal is to grow the community of physicians who feel competent to see patients with primary immune deficiency diseases.

Registration fees for the Annual Meeting and Primary Immunodeficiency Diseases Conference are reduced for members of CIS.

Paving the Way - Fellows in Training
CIS knows that young immunologists are both the future of the Society, and the future of clinical immunology. CIS is committed to meeting the needs of these emerging leaders by holding Summer Schools for senior fellows in the specialty of Primary Immunodeficiency Diseases. CIS also wants to ensure that these voices are heard, and has a committee specifically for them: New Immunologists in Training/Fellows in Training (NIT/FIT), who are fellows at leading institutions around the world. The NIT/FIT Committee interacts closely with all CIS committees and leadership to make certain that CIS’s programs and publications reflect the needs of our Trainee Members. CIS also offers free membership to all trainees enrolled in a recognized Allergy/Immunology training program. Please contact the CIS National Office or visit www.clinimmsoc.org for more information.

Regular membership is open to those individuals who:
• are engaged in research in the area of clinical immunology or have contributed to or are engaged in the practice of clinical immunology;
• have an MD, DO, PhD or equivalent academic degree;
• have made scholarly contributions as defined by the Council;
• are active, bona fide representatives of the international scientific community with a specialty or interest in a field related to clinical immunology.

The cost for 2014 Developing Countries membership is $50.00, Regular membership in CIS is $50.00 for those who are one year out of training, $125.00 for those two years out of training, and $200.00 for those 3+ years out of training.

Please visit www.clinimmsoc.org or contact the CIS Office at info@clinimmsoc.org for more information.

CIS Listservs
In addition, CIS members have access to the archived listserv discussions that are posted on the Members Only page of the website.

Please visit www.clinimmsoc.org and click on "Educational Resources" for more information.

PIDD Listserv
CIS-PIDD is a professional group of physicians and scientists with an interest in primary immunodeficiencies. The purpose of the group is to enhance collaborations and exchange information among members. We welcome physicians who provide care for patients with immunodeficiencies and scientists who are doing research related to the primary immunodeficiencies who wish to join our group.

FIT Listserv
CIS-NIT/FIT is a group of fellows-in-training and new immunologists who have completed their training within the past five years with an interest in primary immunodeficiencies. The purpose of this group is to enhance networking, collaborations and information exchange for NITs/FITs. This can be a venue to ask colleagues at a similar stage of your career regarding work-, research-, and/or care-related issues.
Baltimore Visitor Information

Things to Do:
The Hilton Baltimore is located in downtown Baltimore’s Inner Harbor district.

Harborplace and the Gallery
Located in the heart of the Inner Harbor on Pratt Street, Harborplace and The Gallery offer unique shopping, diverse dining and a variety of entertainment right on the picturesque waterfront.

Maryland Science Center
Let your senses and your mind wander as you experience the numerous sights and hands-on activities at the Maryland Science Center. Featuring an IMAX theater and a planetarium, it’s sure to please everyone.

The National Aquarium
The National Aquarium in Baltimore houses sharks, dolphins, rays and tropical fish among the more than 16,000 creatures in naturalistic exhibits, including a walk-through rain forest, an exciting live-action dolphin show and a new Australian exhibit.

World Trade Center
Seeming to hover 405 feet directly over top of the harbor, the World Trade Center in Baltimore offers the best view of the city in every direction from the “Top of the World” Observation Level on the 27th floor. Constructed in 1977, its 32 floors make up the world’s tallest equilateral 5-sided building.

Fort McHenry
A water-taxi ride away, you can learn about the Battle of Baltimore and the nation’s history by visiting Fort McHenry. Fireworks conclude Flag Day and Defender’s Day celebrations. And special events include living history weekends where the Fort McHenry Guard performs demonstrations.

Baltimore Orioles
A visit to Camden Yards is just steps away and, if you’re a true baseball fan, be sure to see the Baltimore Orioles Hall of Fame exhibit and the Babe Ruth Birthplace and Museum located nearby. You can also visit the Sports Legends Museum which offers 22,000 square feet of artifacts and interactive exhibits, transforming Camden Station into one of the most spectacular sports museums in America.

Port Discovery Children’s Museum
Port Discovery Children’s Museum provides experiences that ignite imagination, inspire learning and nurture growth through play. The Museum offers 3 floors of educational, interactive and hands-on/minds-on experiences designed for children ages 2-10 years of age. Port Discovery has served over 2.5 million visitors and continues to grow as one of the leading non-traditional educational resources in the Mid-Atlantic region.

Power Plant Live!
A block away from Baltimore’s Inner Harbor is Power Plant Live, a premier dining and entertainment district that features a variety of restaurants and nightclubs surrounding a common plaza. There is also outdoor seating which often features live performances.

Places to Dine:
RUSTY SCUPPER (1.1 miles)
P: (410) 727-3678
Seafood
Open for lunch and dinner
From the inner harbor’s very best authentic Maryland crab cakes and crab soups to the east coast’s freshest oysters plus elegantly prepared shrimp, lobster and beef dishes.

SULLIVAN’S STEAKHOUSE (.4 miles)
P: (410) 962-5503
Steakhouse
Open for lunch and dinner
Indulge in mouthwatering steaks and succulent seafood.

PRATT STREET ALE HOUSE (.2 miles)
P: (410) 244-8900
American
Open for lunch and dinner
Casual restaurant, sports entertainment

LUNA DEL SEA STEAK & SEAFOOD BISTRO (.1 miles)
P: (410) 752-8383
Steak & Seafood
Open for lunch and dinner
Fresh Seafood by local fisheries, organic vegetables and produce form local farmers and grass beef and poultry from local markets.

KONA GRILL (.4 miles)
P: (410) 244-8994
Japanese
Open for lunch and dinner
Modern American cuisine - prepared in their scratch kitchen. Or, enjoy stunningly fresh sushi, prepared at their full sushi bar.

BRIO TUSCAN GRILLE (.9 miles)
P: (410) 637-3440
Italian
Open for lunch and dinner
Authentic, northern Italian cuisine

Baltimore Water Taxi
For the perfect transportation in and around Baltimore’s Inner Harbor, the water taxi is an affordable solution. Located on Lancaster Street, one price buys unlimited rides for the day and group discount rates are available. Native Baltimore residents and frequent city visitors often opt for the frequent floater annual pass.

Baltimore Maritime Museum
Located at Pier 3 and Pier 5, be sure to see the treasures of Inner Harbor by touring the USS Torsk, the USCGC Taney, the Lightship Chesapeake and more. Visit the Maritime Museum and you’ll receive a discount for the USS Constellation, the only Civil War ship still floating today.

Baltimore Orioles
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From the inner harbor’s very best authentic Maryland crab cakes and crab soups to the east coast’s freshest oysters plus elegantly prepared shrimp, lobster and beef dishes.

SULLIVAN’S STEAKHOUSE (.4 miles)
P: (410) 962-5503
Steakhouse
Open for lunch and dinner
Indulge in mouthwatering steaks and succulent seafood.

PRATT STREET ALE HOUSE (.2 miles)
P: (410) 244-8900
American
Open for lunch and dinner
Casual restaurant, sports entertainment

LUNA DEL SEA STEAK & SEAFOOD BISTRO (.1 miles)
P: (410) 752-8383
Steak & Seafood
Open for lunch and dinner
Fresh Seafood by local fisheries, organic vegetables and produce form local farmers and grass beef and poultry from local markets.

KONA GRILL (.4 miles)
P: (410) 244-8994
Japanese
Open for lunch and dinner
Modern American cuisine - prepared in their scratch kitchen. Or, enjoy stunningly fresh sushi, prepared at their full sushi bar.

BRIO TUSCAN GRILLE (.9 miles)
P: (410) 637-3440
Italian
Open for lunch and dinner
Authentic, northern Italian cuisine

Baltimore Water Taxi
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Baltimore Orioles
A visit to Camden Yards is just steps away and, if you’re a true baseball fan, be sure to see the Baltimore Orioles Hall of Fame exhibit and the Babe Ruth Birthplace and Museum located nearby. You can also visit the Sports Legends Museum which offers 22,000 square feet of artifacts and interactive exhibits, transforming Camden Station into one of the most spectacular sports museums in America.

Port Discovery Children’s Museum
Port Discovery Children’s Museum provides experiences that ignite imagination, inspire learning and nurture growth through play. The Museum offers 3 floors of educational, interactive and hands-on/minds-on experiences designed for children ages 2-10 years of age. Port Discovery has served over 2.5 million visitors and continues to grow as one of the leading non-traditional educational resources in the Mid-Atlantic region.

Power Plant Live!
A block away from Baltimore’s Inner Harbor is Power Plant Live, a premier dining and entertainment district that features a variety of restaurants and nightclubs surrounding a common plaza. There is also outdoor seating which often features live performances.

Places to Dine:
RUSTY SCUPPER (1.1 miles)
P: (410) 727-3678
Seafood
Open for lunch and dinner
From the inner harbor’s very best authentic Maryland crab cakes and crab soups to the east coast’s freshest oysters plus elegantly prepared shrimp, lobster and beef dishes.

SULLIVAN’S STEAKHOUSE (.4 miles)
P: (410) 962-5503
Steakhouse
Open for lunch and dinner
Indulge in mouthwatering steaks and succulent seafood.

PRATT STREET ALE HOUSE (.2 miles)
P: (410) 244-8900
American
Open for lunch and dinner
Casual restaurant, sports entertainment

LUNA DEL SEA STEAK & SEAFOOD BISTRO (.1 miles)
P: (410) 752-8383
Steak & Seafood
Open for lunch and dinner
Fresh Seafood by local fisheries, organic vegetables and produce form local farmers and grass beef and poultry from local markets.

KONA GRILL (.4 miles)
P: (410) 244-8994
Japanese
Open for lunch and dinner
Modern American cuisine - prepared in their scratch kitchen. Or, enjoy stunningly fresh sushi, prepared at their full sushi bar.

BRIO TUSCAN GRILLE (.9 miles)
P: (410) 637-3440
Italian
Open for lunch and dinner
Authentic, northern Italian cuisine

Baltimore Water Taxi
For the perfect transportation in and around Baltimore’s Inner Harbor, the water taxi is an affordable solution. Located on Lancaster Street, one price buys unlimited rides for the day and group discount rates are available. Native Baltimore residents and frequent city visitors often opt for the frequent floater annual pass.

Baltimore Maritime Museum
Located at Pier 3 and Pier 5, be sure to see the treasures of Inner Harbor by touring the USS Torsk, the USCGC Taney, the Lightship Chesapeake and more. Visit the Maritime Museum and you’ll receive a discount for the USS Constellation, the only Civil War ship still floating today.
Bringing hope.
Inspiring innovation.

Vidara Therapeutics Inc. proudly supports the Clinical Immunology Society in its mission to facilitate education, translational research, and novel approaches to therapy in clinical immunology to promote excellence in the care of patients with immunologic and inflammatory disorders.

Please visit vidararx.com to learn more about our products.
## Schedule of Events

### THURSDAY, APRIL 10

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>6:00pm – 6:10pm</td>
<td>Welcome from CIS President</td>
<td>KEY 6 BALLROOM</td>
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<td></td>
<td>John Routes, MD Medical College of Wisconsin</td>
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<tr>
<td>6:10pm – 7:00pm</td>
<td>Robert A. Good Lecture: Opening Lecture</td>
<td>KEY 6 BALLROOM</td>
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<td>1 AMA PRA Category 1 Credits™</td>
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<td></td>
<td>Moderator: Charlotte Cunningham-Rundles, MD PhD Mt. Sinai Medical Center</td>
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<td></td>
<td>Speaker: MOLECULAR REGULATION OF HUMORAL IMMUNE RESPONSES; INSIGHTS FROM PIDS</td>
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<td>Stuart G. Tangye, PhD Garvan Institute of Medical Research, Australia</td>
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<tr>
<td>7:00pm – 8:30pm</td>
<td>Opening Reception</td>
<td>KEY 8-12 BALLROOM</td>
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### FRIDAY, APRIL 11

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>7:00am – 8:00am</td>
<td>Breakfast</td>
<td>KEY FOYER SOUTH</td>
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<tr>
<td>7:30am – 8:00am</td>
<td>Guided Poster Session Group 1</td>
<td>KEY 8-12 BALLROOM</td>
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<td></td>
<td>Moderator: Kathleen E. Sullivan, MD PhD Children's Hospital of Philadelphia</td>
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<td>Guided Posters: E RLY DETECTION OF JUVENILE MYELOMONOCYTIC LEUKEMIA (JMML) DUE TO ABSENT TREC S ON NEWBORN SCREENING (NBS) FOR SEVERE COMBINED IMMUNODEFICIENCY (SCID)</td>
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<td></td>
<td>Richard L. Wasserman, MD PhD Medical City Children's Hospital</td>
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<td>KABUKI SYNDROME IS ASSOCIATED WITH IMMUNE DYSFUNCTION FEATURING NOT ONLY IMMUNE DEFICIENCY BUT ALSO AUTOIMMUNITY AND LYMPHOPROLIFERATION</td>
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<td>Mark C. Hannibal, MD PhD University of Michigan</td>
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<td>IMPULSE OSCILLOMETRY (IOS) REVEALS INCREASED PULMONARY IMPEDENCE IN CHILDREN WITH ADENOSINE DEAMINASE-DEFICIENT SEVERE COMBINED IMMUNODEFICIENCY (ADA-SCID)</td>
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<td>Robert Sokolic, MD National Human Genome Research Institute, NIH</td>
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<td>FOOD ALLERGY IN PRIMARY IMMUNODEFIENCY DISEASES; PREVALENCE WITHIN THE USIDNET REGISTRY</td>
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<td>8:00am – 10:00am</td>
<td>Plenary: The Colonizers and Us</td>
<td>KEY 6 BALLROOM</td>
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<td>Moderator: Alexandra Freeman, MD National Institute of Allergy and Infectious Diseases, National Institutes of Health</td>
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<td>Speakers: Scott Snapper, MD Boston Children's Hospital</td>
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<tr>
<td>8:05am – 8:35am</td>
<td>GUT MICROBES: SOURCE OF THERAPEUTICS AGAINST INFLAMMATORY DEMYELINATION IN THE CENTRAL NERVOUS SYSTEM</td>
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<td>8:35am – 9:05am</td>
<td>Javier Ochoa-Reparaz, PhD Sanford-Burnham Medical Research Institute</td>
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<tr>
<td>9:05am – 9:35am</td>
<td>Lloyd Kasper, MD Geisel School of Medicine at Dartmouth</td>
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<tr>
<td>9:45am – 10:00am</td>
<td>Panel Discussion</td>
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<tr>
<td>10:00am – 10:30am</td>
<td>Morning Break</td>
<td>KEY FOYER SOUTH</td>
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Schedule of Events

FRIDAY, APRIL 11, continued

10:30am – 11:30am  Tales from the Listserv
KEY 6 BALLROOM
1 AMA PRA Category 1 Credit™

Moderator:  Elie Haddad, MD PhD CHU Ste-Justine, University of Montreal

Speakers:  MYSTERY CASE
Jane Peake, MBBS FRACP DTM&H Royal Children's Hospital, Australia
SHOULD WE TRANSPLANT?
Yesim Yilmaz Demirdag, MD Columbia University Medical Center
ABNORMAL NEWBORN SCREEN AND T-CELL LYMPHOPENIA IN CARDIAC SURGERY PATIENTS
Richard L. Wasserman, MD PhD Medical City Children's Hospital

11:30am – 1:00pm  Lunch / Poster Viewing / Exhibit Hall
KEY 8-12 BALLROOM

1:00pm – 3:00pm  Plenary: Infectious Manifestations of PID Around the World
KEY 6 BALLROOM
2 AMA PRA Category 1 Credits™

Moderator:  Sarah Browne, MD National Institute of Allergy and Infectious Diseases, National Institutes of Health

Speakers:  ENDEMIC INFECTIONS IN SE ASIA AS INDICATORS FOR PID
Yu-Lung Lau, MBChB MD The University of Hong Kong

1:30pm – 2:00pm  COMPLEMENT DEFICIENCIES AND INCREASED SUSCEPTIBILITY TO MENINGOCOCCAL DISEASE IN SOUTH AFRICA

Ann Orren, BSc MB ChB MD ADRCU, Departments of Medicine and Chemical Pathology, University of Cape Town Institute of Infection and Immunity School of Medicine, Cardiff, University, UK

2:00pm – 3:00pm  BCG VACCINATION IN SCID PATIENTS: COMPLICATIONS, RISKS, POLICIES AND TIME FOR A CHANGE

Sergio Rosenzweig, MD PhD National Institute of Allergy and Infectious Diseases, National Institutes of Health

Oral Abstracts:

2:30pm – 2:40pm  CRYPTOCOCCAL MENINGITIS ASSOCIATED WITH AUTO-ANTIBODIES AGAINST GM-CSF: A CASE REPORT
Merin E. Kuruvilla, MD UTSW Medical Center

2:40pm – 2:50pm  ANTI-GM-CSF AUTOANTIBODIES IN PATIENTS WITH NOCARDIOSIS OF THE CENTRAL NERVOUS SYSTEM
Lindsey B. Rosen NIAID, NIH

2:50pm – 3:00pm  RECURRENT SPONTANEOUS CENTRAL NERVOUS SYSTEM CANDIDIASIS: WHAT TO DO WHEN THE CARDS ARE STACKED AGAINST YOU?
Donald C. Vinh, MD McGill University Health Centre

3:00pm – 3:30pm  Afternoon Break
KEY FOYER SOUTH

3:30pm – 5:00pm  Concurrent Workshops
Session 1: Malignancy in PIDD
KEY 21 BALLROOM
1.5 AMA PRA Category 1 Credits™

Moderator:  Helen Su, MD PhD National Institute of Allergy and Infectious Diseases, National Institutes of Health

Speakers:

3:30pm – 3:50pm  CANCER IN PRIMARY IMMUNODEFICIENCIES
Brahm H. Segal, MD FACP FIDSA Roswell Park Cancer Institute

3:50pm – 4:00pm  VIRAL SUSCEPTIBILITY AND MALIGNANCY IN DOCK8 IMMUNODEFICIENCY
Helen Su, MD PhD National Institute of Allergy and Infectious Diseases, National Institutes of Health

4:10pm – 4:30pm  PATIENTS WITH SCID:
Patricia Lugar, MD Duke Medical Center University

4:30pm – 5:00pm  PANEL DISCUSSION

3:30pm – 5:00pm  Session 2: Bugs and Drugs
KEY 6 BALLROOM
1.5 AMA PRA Category 1 Credits™

Moderator:  Steve Holland, MD National Institute of Allergy and Infectious Diseases, National Institutes of Health

Speakers:

3:30pm – 3:50pm  NOVEL ANTI-BACTERIAL EFFECTOR PATHWAY, PERFORIN-2, PROVIDES A NEW PARADIGM FOR CELLULAR DEFENSE AGAINST BACTERIAL PATHOGENS
Eckhard Podack, MD University of Miami

3:50pm – 4:10pm  THE APPLICATION OF GENOME-SEQUENCING TO TRACK THE SPREAD OF HOSPITAL-ASSOCIATED INFECTIONS
Evan Snitkin, PhD National Human Genome Research Institute, National Institutes of Health

4:10pm – 4:30pm  PANEL DISCUSSION
### Schedule of Events

**FRIDAY, APRIL 11, continued**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>4:30pm – 4:40pm</td>
<td>Oral Abstract: DOCK8 REGULATES LYMPHOCYTE SHAPE INTEGRITY FOR SKIN ANTI-VIRAL RESPONSES. Qian Zhang, MD National Institute of Allergy and Infectious Diseases, National Institutes of Health</td>
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<tr>
<td>4:40pm – 5:00pm</td>
<td>Panel Discussion</td>
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<td>5:00pm – 5:15pm</td>
<td>Evening Break</td>
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<td>5:15pm – 6:15pm</td>
<td>The CIS Fahey/Rose Founders Lecture</td>
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<td><strong>Moderator:</strong> James Verbsky, MD PhD Medical College of Wisconsin</td>
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<td><strong>Speaker:</strong> Alexander Rudensky, PhD Memorial Sloan-Kettering Cancer Center</td>
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**SATURDAY, APRIL 12**

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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:30am – 9:00am</td>
<td>Concurrent Breakfast Sessions</td>
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<td>Session 1: Immune Globulin &amp; Replacement Therapy: Individualizing a Regimen</td>
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<td>KEY 2 BALLROOM</td>
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<td>1.5 AMA PRA Category 1 Credits™</td>
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<td><strong>Moderator:</strong> Vincent R. Bonagura, MD Alexandra and Steven Cohen Children's Medical Center of NY</td>
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<td></td>
<td><strong>Panelists:</strong> Carla Duff, CPNP MSN CCRP USF at All Children's Hospital</td>
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<td>Mary Hintermeyer, APNP Children's Hospital of Wisconsin</td>
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<td>Richard L. Wasserman, MD PhD Medical City Children's Hospital</td>
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<td>M. Elizabeth Younger, CPNP PhD Johns Hopkins</td>
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<td>7:30am – 9:00am</td>
<td>Session 2: Targeted Manipulation of the Genome</td>
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<td>KEY 6 BALLROOM</td>
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<td><strong>Moderator:</strong> Luigi D. Notarango, MD PhD Children's Hospital Boston, Harvard Medical School</td>
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<td><strong>Speakers:</strong></td>
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<td>Carl June, MD University of Pennsylvania</td>
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<td></td>
<td>Medical Correction of Hematopoietic Stem Cells for Severe Combined Immunodeficiency Diseases Matthew Porteous, MD Stanford School of Medicine</td>
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8:15am – 8:35am NUCLEASE-MEDIATED GENOME ENGINEERING FOR ADOPTIVE T-CELL THERAPIES

**Moderator:** Andy Scharenberg, MD University of Washington

8:35am – 8:45am TARGETED GENE THERAPY IN THE TREATMENT OF X-LINKED HYPER-IGM SYNDROME

**Moderator:** Caroline Kuo, MD UCLA Medical Center

8:45am – 9:00am Panel Discussion

9:00am – 9:30am CIS Business Meeting

9:30am – 10:00am Guided Poster Sessions

**Group 1**

**Moderator:** Kathleen E. Sullivan, MD Children's Hospital of Philadelphia

**Guided Posters:**

- Eleonora Gambineri, MD University of Florence
  - FATAL HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS (HLH) IN A 24 YEAR OLD FEMALE DUE TO PREVIOUSLY UNDIAGNOSED PRF1 PT450M MUTATION IN THE C2 DOMAIN
  - Sara Barretttler, MD Yale-New Haven Hospital
  - PROTEIN MODELING LED TO THE DISCOVERY THAT MUTATIONS IN THE GENE ENCODING PI(3) K CATALYTIC SUBUNIT p110d (PIK3CD) CAUSE PASLI (p110d ACTIVATING MUTATION CAUSING SENESECT T CELLS, LYMPHADENOPATHY, AND IMMUNODEFIENCY) DISEASE
  - Julie E. Niemela, MS MLS NIH
  - GAIN OF STAT1 SIGNALING ASSOCIATED WITH OVERLAPPING PATHOPHYSIOLOGY IN STAT3, IL21R AND STAT1 MUTANT PATIENTS
  - Diego B. Lopez NIH

9:30am – 10:00am Guided Poster Sessions

**Group 2**

**Moderator:** Ralph S. Shapiro, MD Midwest Immunology Clinic

**Guided Posters:**

- Manish Ramesh, MBBS PhD Icahn School of Medicine at Mount Sinai
  - STAT1 GAIN OF FUNCTION MUTATIONS ARE INFREQUENT IN PULMONARY NONTUBERCULOUS MYCOBACTERIAL INFECTION
  - Eva P. Szymanski, BS National Institutes of Allergy & Infectious Diseases
Schedule of Events

SATURDAY, APRIL 12, continued

INVESTIGATING THE ROLE OF INDUCIBLE T-CELL KINASE IN CD8+ T-LYMPHOCYTE CYTOLYTIC EFFECTOR FUNCTION
Senta Kapnick NHGRI, NIH
SOMATIC REVERSION IN DOCK8 IMMUNODEFICIENCY MODULATES DISEASE PHENOTYPE
Huie Jing, PhD NIAID, NIH

9:30am – 10:00am   Morning Break
KEY FOYER SOUTH

10:00am – 12:00pm  Plenary: Cellular Therapies
KEY 6 BALLROOM
2 AMA PRA Category 1 Credits™
Moderator:
Francisco A. Bonilla, MD PhD Children’s Hospital Boston
Speakers:
Troy Torgerson, MD PhD University of Washington
Catherine Bollard, MD Children’s National Medical Center
Elie Haddad, MD, PhD CHU Ste-Justine, University of Montreal

10:05am – 10:15am  transplantation

10:15am – 10:40am  VIRUS SPECIFIC T-CELL THERAPY POST TRANSPLANT - BROADENING APPLICABILITY
Catherine Bollard, MD Children’s National Medical Center

10:40am – 11:00am  Elie Haddad, MD, PhD CHU Ste-Justine, University of Montreal

11:00am – 11:20am  PRIMARY IMMUNE DEFICIENCIES HELP TO REVEAL MOLECULAR REQUIREMENTS FOR HUMAN T FOLLICULAR Helper CELLS
Stuart G. Tangye, PhD Garvan Institute of Medical Research

11:20am – 11:30am  ADOPTIVE TRANSFER OF ANTI-VIRAL CYTOTOXIC T LYMPHOCYTES TO IMPROVE SURVIVAL IN PRIMARY IMMUNODEFICIENCY PATIENTS INDEPENDENT OF HEMATOPOIETIC STEM CELL TRANSPLANT
Sarah K. Nicholas, MD Baylor College of Medicine

11:30am – 11:40am  DIFFERENTIAL ROLE FOR DNA LIGASE 4, ARTEMIS AND DNA-PKCS IN THE GENERATION, DNA DAMAGE RESPONSE AND MYELOID DIFFERENTIATION OF HUMAN IPS CELLS
Kerstin Felgentreff, MD Boston Children’s Hospital

11:40am – 12:00pm  Panel Discussion

12:00pm – 1:30pm   Lunch / Poster Viewing / Exhibit Hall
KEY 8-12 BALLROOM

1:30pm – 3:30pm   Plenary Session: Hot New Defects
KEY 6 BALLROOM
2 AMA PRA Category 1 Credits™
Moderator:
Elena E. Perez, MD PhD University of Miami School of Medicine
Speakers:
1:35pm – 1:55pm  VERY EARLY DEFECTS IN B CELL DEVELOPMENT
Mary Ellen Conley, MD Rockefeller University

1:55pm – 2:15pm  NEW GENETIC ETIOLOGIES OF PIDS
Capucine Picard, MD PhD Hôpital Necker - Enfants Malades

2:15pm – 2:35pm  GAIN OF FUNCTION MUTATIONS IN PHOSPHOINOSITIDE 3-KINASE D-CONNECTING THE DOTS, FILLING IN THE GAPS
Gulbu Uzel, MD National Institute of Allergy and Infectious Diseases, National Institutes of Health

2:35pm – 3:00pm  ORAL ABSTRACTS:

3:00pm – 3:10pm  ERBB2IP MUTATIONS DISRUPT TGF-B PATHWAY SIGNALING IN SYNDROMIC ATOPY IN HUMANS
Jonathan Lyons, MD NIAID/NIAID

3:10pm – 3:30pm  NOVEL IMMUNODYREGULATION DISORDER ASSOCIATED WITH A GAIN-OF-FUNCTION MUTATION IN AN Ubiquitous G-PROTEIN COUPLED RECEPTOR REGULATOR
Ian T. Lamborn, BSc NIAID/NIAID

3:30pm – 4:00pm  Panel Discussion

3:30pm – 4:00pm  Afternoon Break
KEY FOYER SOUTH

4:00pm – 6:00pm  Plenary: Innate Immunity & Inflammation
KEY 6 BALLROOM
2 AMA PRA Category 1 Credits™
Moderators:
Artemio M. Jongco, III, MD PhD Feinstein Institute of Medical Research
Joyce T. Hsu, MD Children’s Hospital Boston
Speakers:
4:05pm – 4:30pm  Jordan Orange, MD PhD Baylor College of Medicine

4:30pm – 4:50pm  RAPHAELA GOBDACH-MANSKY, MD National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health

4:50pm – 5:10pm  Sophie Hambleton, MD PhD Newcastle University Medical School
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<th>Time</th>
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<tr>
<td>8:00am – 9:30am</td>
<td>Concurrent Breakfast Sessions</td>
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<td></td>
<td>Session 1: Proactive Surveillance</td>
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<td>KEY 6 BALLROOM</td>
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<td>Moderator:</td>
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<td>Burcin Uygungil, MD MPH Children’s National Health Systems</td>
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<td>Speakers:</td>
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<td>Charlotte Cunningham-Rundles, MD PhD Mt. Sinai Medical Center</td>
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<td>8:25am – 8:45am</td>
<td>Howard Lederman, MD PhD Johns Hopkins</td>
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<td>8:45am – 9:05am</td>
<td>David T. Teachey, MD Children’s Hospital of Philadelphia, University of Pennsylvania School of Medicine</td>
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<tr>
<td></td>
<td>Oral Abstract:</td>
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<td>CLINICAL PHENOTYPE OF IDIOPATHIC CD4 LYMPHOPENIA (ICL)</td>
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<td>9:05am – 9:15am</td>
<td>Alexandra F. Freeman, MD NIH/NIAID</td>
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<td>9:15am – 9:30am</td>
<td>Panel Discussion</td>
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<td>8:00am – 9:30am</td>
<td>Session 2: Genetic Testing</td>
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<td>Moderator:</td>
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<td>Thomas A. Fleisher, MD National Institutes of Health</td>
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<td>Speakers:</td>
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<tr>
<td>8:00am – 8:45am</td>
<td>CLINICAL GENOMICS IN IMMUNOLOGY</td>
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<td>James Lupski, MD PhD Baylor College of Medicine</td>
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<td>11:00am – 11:10am</td>
<td>John Routes, MD Medical College of Wisconsin</td>
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<td>11:10am – 11:20am</td>
<td>Changes in Immunoglobulin Levels and T-Cell Numbers with Age in Patients with 22q11.2 Deletion Syndrome</td>
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<td>11:20am – 11:30am</td>
<td>Oral Abstract:</td>
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<td>ClINICAL GENOMICS IN IMMUNOLOGY</td>
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<td>11:30am – 12:00pm</td>
<td>Panel Discussion</td>
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**Saturday, April 12, continued**

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<tr>
<th>Time</th>
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<tr>
<td>5:10pm – 5:20pm</td>
<td>IMPAIRMENT OF T-INDEPENDENT ANTIBACTERIAL IGM RESPONSES DUE TO IRAK-4 AND MYD88-DEFICIENCIES</td>
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<td>PJ Maglione, MD PhD Mount Sinai School of Medicine</td>
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<td>Oral Abstract:</td>
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<td>CLINICAL GENOMICS IN IMMUNOLOGY</td>
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<tr>
<td>5:20pm – 5:30pm</td>
<td>Autosomal recessive PGM3 mutations Link Glucosylation Defects to Atopy, Immune Deficiency, Autoimmunity, and Neurocognitive Impairment</td>
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<td>Yu Zhang National Institutes of Health</td>
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<td>5:30pm – 5:40pm</td>
<td>A New Case of Hereditary Pulmonary Alveolar Proteinosis Caused by CSF2RB Mutation: Importance of Functional Testing and Biological Features to Evoke the Diagnosis</td>
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<td>Jean Jacques De Bruycker, MD Sainte-Justine Hospital</td>
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<td>5:40pm – 6:00pm</td>
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<td>6:00pm – 7:30pm</td>
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<td>Please note that this reception is open to everyone</td>
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<td>Burcin Uygungil, MD MPH Children’s National Health Systems</td>
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<td>8:00am – 8:25am</td>
<td>Charlotte Cunningham-Rundles, MD PhD Mt. Sinai Medical Center</td>
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<td>8:25am – 8:45am</td>
<td>Howard Lederman, MD PhD Johns Hopkins</td>
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<td>8:45am – 9:05am</td>
<td>David T. Teachey, MD Children’s Hospital of Philadelphia, University of Pennsylvania School of Medicine</td>
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<td>Oral Abstract:</td>
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<td>CLINICAL PHENOTYPE OF IDIOPATHIC CD4 LYMPHOPENIA (ICL)</td>
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<td>Alexandra F. Freeman, MD NIH/NIAID</td>
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<td>10:00am – 12:00pm</td>
<td>Plenary: Targeted Therapies</td>
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<td>Michael D. Keller, MD Children’s National Health System</td>
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<td>10:00am – 10:20am</td>
<td>Abatacept and Lymphocytic Interstitial Lung Disease</td>
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<td>Michael Jordan, MD Cincinnati Children’s Hospital Medical Center</td>
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<td>10:20am – 10:40am</td>
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<td>10:40am – 11:00am</td>
<td>John O’Shea, MD National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health</td>
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<td>10:40am – 11:10am</td>
<td>John Routes, MD Medical College of Wisconsin</td>
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<td>11:00am – 11:10am</td>
<td>Oral Abstract:</td>
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<tr>
<td></td>
<td>B Cell-Targeted Therapy in Narcolepsy / Cataplexy Post H1N1 Vaccination</td>
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<td>Jean Jacques De Bruycker, MD Sainte-Justine Hospital</td>
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<td>11:10am – 11:20am</td>
<td>Changes in Immunoglobulin Levels and T-Cell Numbers with Age in Patients with 22q11.2 Deletion Syndrome</td>
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<td>11:20am – 11:30am</td>
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<td>ClINICAL GENOMICS IN IMMUNOLOGY</td>
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**Sunday, April 13**

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<td>Thomas A. Fleisher, MD National Institutes of Health</td>
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<td>James Lupski, MD PhD Baylor College of Medicine</td>
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Biotherapies for Life™

At CSL Behring, we are committed to saving lives and improving the quality of life for people with rare and serious diseases worldwide.

Through our continued focus on innovation, we develop new proteins of therapeutic benefit from plasma and new clinical indications for existing therapies, providing “Biotherapies for Life.”

CSL Behring

www.CSLBehring.com
Calling all Fellows!
Submit an application today

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;
- Junior faculty members.

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;
- Stimulate future collaborations between young investigators in different medical centers and countries, and between young investigators and experienced physician/scientists in the field.

Co-Chairs:
Charlotte Cunningham-Rundles, MD PhD
Mount Sinai Medical Center
New York, NY

Kathleen E. Sullivan, MD PhD
Children's Hospital of Philadelphia
Philadelphia, PA

Faculty:
Thomas A. Fleisher, MD
National Institutes of Health
Bethesda, MD

Elie Haddad, MD PhD
CHU Ste-Justine, University of Montreal
Montreal, Canada

Steven M. Holland, MD
NIAID, NIH
Bethesda, MD

Luigi D. Notarangelo, MD PhD
Children's Hospital Boston
Harvard Medical School
Boston, MA

Hans D. Ochs, MD
University of Washington
Seattle, WA

Sergio Rosenzweig, MD PhD
NIAID, NIH
Bethesda, MD

Jordan S. Orange, MD PhD
Baylor College of Medicine
Houston, TX

Troy Torgerson, MD PhD
University of Washington
Seattle, WA
Therapy and Beyond
Baxter’s ongoing commitment

For over 25 years, Baxter has provided the primary immunodeficiency community with therapies that can help patients reduce the risk of infection.

Today, we continue our commitment to improving patient experiences through working with clinical experts and patient advocacy groups like the Immune Deficiency Foundation and the Jeffrey Modell Foundation.

We remain dedicated to answering needs through clinical initiatives and programs that offer an essential layer of support for patients and healthcare providers.

Visit the Baxter Booth #304 to learn more.

Committed to advancing therapies and services in the field of primary immunodeficiency
Exhibit Hall Floor Plan

Exhibitions

Booth #: 104
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 #: 108
Accredo
Headquartered in Memphis, Tennessee, Accredo provides specialty pharmacy and related services for patients with certain complex and chronic health conditions.

At Accredo, we know that treatment with specialty medications can be difficult and stressful. We do everything we can to make it simple. Each patient is unique and has different needs. That’s why our services are tailored to you, making sure you receive the best possible treatment.

Our team of specialty-trained pharmacists, nurses, patient care advocates, social workers and insurance coordinators are here to handle everything about your medications for you. When needed, we can coordinate with your doctor and insurer to help you achieve the best possible outcomes from your specialty therapy.

See more at: http://www.accredo.com

Booth #: 110
The Binding Site
The Binding Site is committed to developing special protein assays and automated systems for the improvement of patient care. The market leader in immunodiagnostics for Primary Immunodeficiency Disease, Binding Site assays measure specific antibody response to vaccinations and quantify immunoglobulins, IgG and IgA subclasses. Run on the SPAPLUS® analyzer, an easy-to-use, reliable, efficient complement for laboratories, our assays include Freelite®, widely used in 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.thebindingsite.com

Booth #: 112
Beckman Coulter
Beckman Coulter develops, manufactures and markets products that simplify, automate and innovate complex biomedical testing. Our diagnostic systems are found in hospitals and other critical care settings around the world and produce information used by physicians to diagnose disease, make treatment decisions and monitor patients. Scientists use our life science research instruments to study complex biological problems including causes of disease and new potential therapies or drugs.

Hospital laboratories are our core clinical diagnostic customers. Our life science customers include pharmaceutical and biotechnology companies, universities, medical schools and research institutions. More than 275,000 Beckman Coulter systems operate in both diagnostics and life sciences laboratories on six continents. For more than 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 reducing the cost of care.

Booth #: 204
Vidara Therapeutics, Inc.
Vidara Therapeutics is a specialty biopharmaceutical company focused on serious and often life-threatening rare diseases. www.vidararx.com

Booth #: 208
Walgreens IG Program
Walgreens Infusion Services is the nation’s largest provider of home and alternate treatment site infusion services. With a staff of more than 1,400 clinicians and over 70 infusion pharmacies nationally, Walgreens Infusion Services IG Program treats patients with a wide range of conditions requiring IG therapy. IG trained clinicians and insurance experts are available to support you and your patients 24 hours a day every day. Last year Crescent Healthcare joined the Walgreens team, bringing together two clinical leaders in home and alternate site IG services.
Exhibitors

Booth #: 209
CSL Behring
CSL Behring is a global leader in plasma protein therapeutics. The company manufactures safe and effective plasma-derived and recombinant therapies for treating coagulation disorders, primary immune deficiencies, hereditary angioedema and inherited respiratory disease, and neurological disorders in certain markets. The company’s products are also used in cardiac surgery, organ transplantation, burn treatment and to prevent hemolytic disease of the newborn. CSL Behring is a subsidiary of CSL Limited (ASX:CSL), a biopharmaceutical company with headquarters in Melbourne, Australia. For more information: www.cslbehring-us.com.

Booth #: 210
Springer
Springer is the largest international publisher of scientific books with a portfolio of over 8,000 new books per year and more than 2,200 journals. Take your research and skills to the next level with Springer Immunology products. Stop by our booth to discover an authoritative range of books, and browse the Journal of Clinical Immunology, the official journal of the Clinical Immunology Society. Meet the Immunology editor, Rita Beck, explore our new publications, and enjoy a 20% discount on our books.

Booth #: 211
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 and research.

Booth #: 212
GeneDx
GeneDx is highly respected laboratory, specializing in genetic testing for rare Mendelian 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, next-generation and microarray-based testing.

Booth #: 308
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.

Booth #: 309
AxelaCare
AxelaCare specializes in the administration of Immune Globulin IVIG and other infusible medications. CareExchange is our proprietary clinical outcomes measurement system using validated data that is collected and presented in simple graphical display via secure web access to clinicians to determine optimal care based on dose versus time and collected outcomes.

Booth #: 310
Clinical Immunology Society
The Clinical Immunology Society (CiS) 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. www.clinimmssoc.org

Booth #: 311
Baxter Healthcare-Medical Affairs
The Baxter 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 Baxter BioTherapeutics, please visit www.baxter.com.

Booth #: 312
Life Technologies
Life Technologies Corporation (NASDAQ: LIFE) is a global biotechnology company dedicated to moving science forward to improve life in meaningful ways for everyone. Our premier brands are the most cited, most trusted in the life sciences industry: Invitrogen™, Applied Biosystems®, Gibco®, Molecular Probes®, Novex®, Ambion®, and Ion Torrent™.
1. **WHOLE EXOME SEQUENCING IN PEDIATRIC PATIENTS WITH EARLY ONSET RARE PERINATAL ONSET IMMUNODYSREGULATORY DISEASES THAT PRESENT WITH FEVER AND SYSTEMIC INFLAMMATION**  
   Adriana A Jesus, MD  
   National Institutes of Health (NIH)

2. **STAT3-DEFICIENT HYPER IGE SYNDROME IN A PEDIATRIC COHORT**  
   Aisling Flinn, MB BAO BCH MRCPCH  
   Our Lady’s Children’s Hospital

3. **SUCCESSFUL BILATERAL LUNG TRANSPLANT IN AUTOSOMAL DOMINANT HYPER IgE SYNDROME**  
   Alexandra F. Freeman, MD  
   NIH NIAID

4. **INFECTION PROPHYLAXIS COMPLIANCE IN A CHRONIC GRANULOMATOUS DISEASE POPULATION**  
   Amanda K. Rudman  
   Spergel

5. **NORMAL PERIPHERAL BLOOD B-CELL MATURATION CHARTS**  
   Amer M. Khojah  
   Inova Children's Hospital

6. **HIGH THROUGHPUT SEQUENCING OF THE T CELL AND B CELL RECEPTOR REPERTOIRES IN PATIENTS WITH WISKOTT ALDRICH SYNDROME**  
   Amy E. O'Connell, MD PhD  
   Boston Children’s Hospital

7. **IL2RG REVERSION EVENT IN A COMMON LYMPHOID PROGENITOR LEADS TO DELAYED DIAGNOSIS AND MILD PHENOTYPE**  
   Amy Hsu, BA  
   National Institutes of Allergy & Infectious Diseases (NIAID)

8. **POLYCLONAL HUMAN INTRAVENOUS IMMUNE GLOBULIN (IGIV) WITH HIGH-LEVELS OF RSV NEUTRALIZING ANTIBODIES: A SUMMARY OF ANIMAL AND HUMAN STUDIES**  
   Ann Falsey, MD  
   University of Rochester

9. **COPING WITH CD4+ LYMPHOPENIA**  
   Anne Maityland, MD PhD  
   Mt Sinai School of Medicine

10. **22q11 DELETION SYNDROME, PATIENTS FROM AQUASCALIENTES MEXICO**  
    Aristoteles Alvarez-Cordona, MD  
    Universidad Autonoma De Aguascalientes

11. **EXPLORING THE ROLE OF NEUTROPHIL DYSFUNCTION IN THE DEVELOPMENT OF BRONCHIECTASIS IN X-LINKED AGAMMAGLOBULINEMIA**  
    Artemio M. Jongco, III, MPH MD PhD  
    Hofstra - North Shore LIJ School of Medicine

12. **SEVERE CONGENITAL NEUTROPHENIA MISDIAGNOSED AS NEONATAL LUPUS WITH RECURRENCE OF LUPUS-RELATED FEATURES POST-MATCHED RELATED CORD BLOOD TRANSPLANT**  
    Ashley Shaver  
    University of Michigan

13. **COEXISTENCE OF CLONAL EXPANDED AUTOLOGOUS AND TRANSPLACENTAL-ACQUIRED MATERNAL T CELLS IN RAG1-DEFICIENT SCID**  
    Atar Lev  
    Sheba Medical Center

14. **PERFORMANCE OF NEXT GENERATION SEQUENCING-BASED GENE PANELS FOR PRIMARY IMMUNODEFICIENCIES**  
    Attila Kumanovics, MD  
    University of Utah

15. **SPECTRUM OF PRIMARY IMMUNODEFICIENCY DISEASES IN A SAUDI TERTIARY CARE HOSPITAL OVER A PERIOD OF THREE YEARS**  
    Bander Al Saud

16. **EBV-ASSOCIATED B-CELL LYMPHOMA IN SEVERE COMBINED IMMUNODEFICIENCY CAUSED BY CHROMOSOME 16p11.2 DELETION AND CORONIN-1A MUTATION**  
    Barry J. Pelz  
    Northwestern University

17. **NECROTIZING FISTULA IN INFANCY: A DIAGNOSTIC DILEMMA**  
    Beata Derfalvi, MD PhD  
    IWK Health Centre-Dalhousie University

18. **EVALUATION OF LIPID PROFILE AND APOLIPOPROTEIN A-I: RELATIONSHIP WITH ENZYMES ASSOCIATED WITH CARDIOVASCULAR RISK IN PATIENTS WITH HYPOGAMMAGLOBULINEMIA**  
    Beatriz Tavares Costa Carvalho, MD

19. **DYSLIPIDEMIA AND REDUCED ANTIOXIDANT VITAMINS IN ATAXIA TELANGIECTASIA PATIENTS**  
    Beatriz Tavares Costa Carvalho, MD

20. **DETECTION OF ANTI-TISSUE TRANSGLUTAMINASE AUTOANTIBODIES IN RAG1 HYPOMORPH MURINE MODEL OF LEAKY SCID**  
    Boglarka Ujhazi  
    Massachusetts General Hospital

21. **DISSEMINATED COCCIDIOIDOMYCOSIS: RISK FACTORS AND REVIEW OF THE LITERATURE**  
    Camila D. Odio, BA  
    National Institutes of Allergy & Infectious Diseases (NIAID)

22. **A PATIENT WITH DYSKERATOSIS CONGENITA PRESENTING WITH IDIOPATHIC PULMONARY FIBROSIS AND ANTISYNTHETASE AUTOANTIBODIES**  
    Charles A. Filion, MD  
    University of Montreal

23. **TRICHOSPORON INKIN PNEUMONIA AND OSTEOMYELITIS IN A LYONIZED CARRIER OF X-LINKED CHRONIC GRANULOMATOUS DISEASE**  
    Christa S. Zerbe, MD  
    NIAID/NIH

24. **IMMUNOLOGISTS UNDERSTANDING OF COMPARATIVE EFFECTIVENESS RESEARCH**  
    Cora Scarlet, RN MSN  
    CSL Behring

25. **COMPOUND HETEROZYGOUS RAG1 MUTATIONS IN A PATIENT WITH COMMON VARIABLE IMMUNODEFICIENCY**  
    David Buchbinder, MD MS  
    Children’s Hospital of Orange County-University of California at Irvine

26. **SERIAL SERUM IMMUNOGLOBULIN (IGG) THROUGH LEVELS IN PATIENTS WITH PRIMARY ANTIBODY DEFICIENCY ON REGULAR REPLACEMENT OF INTRAVENOUS IMMUNOGLOBULIN AND ITS CORRELATION WITH INFECTIONS IN INDIAN CHILDREN**  
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    Postgraduate Institute of Medical Education and Research
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Hanady Ale, MD  Miami Children's Hospital

39 SOMATIC REVERSION IN Dock8 IMMUNODEFICIENCY MODULATES DISEASE PHENOTYPE
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Jean Jacques De Bruycker, MD

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Jennifer K. Grossman, MD FRCP

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Jennifer L. Stoddard  CC/NIH

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Jocelyn Farmer, MD PhD  Massachusetts General Hospital

48 DEVELOPMENT OF AN EDUCATIONAL CURRICULUM, QUALITY OF LIFE EVALUATION, AND ADHERENCE ASSESSMENT FOR PEDIATRIC PATIENTS ON SUBCUTANEOUS IMMUNOGLOBULIN THERAPY
Joel Gallagher, MD  Levine Childrens Hospital

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John G. Devane  Vridara Therapeutics Research Ltd.

50 SKULL OSTEOMYELITIS AS INITIAL PRESENTATION OF CHRONIC GRANULOMATOUS DISEASE (CGD)
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