Monday, October 16, 2023

9:00am – 8:30pm  
**Registration Open**  
Salon Foyer, 3rd Floor

1:00pm – 5:00pm  
**Featured Topic: Cellular Therapies: New Opportunities and New Challenges**  
Salon I, 3rd Floor  
*Moderators:*
- Matthew Anderson, MD, PhD, A(ACHI), FCAP
- Zachary Antovich, BS
- Maria Bettinotti, PhD, F(ACHI), FACMGG
- William Hildebrand, PhD, F(ACHI)
- Abeer Madbouly, PhD
- Martin Maiers, MS

*Speakers:*
- Maria Bettinotti, PhD, F(ACHI), FACMGG
- Heather Stefanski, MD, PhD
- Hind Rafei, MD, MS
- Joseph R. Leventhal, MD, PhD
- James Mathew, PhD
- Everett Meyer, MD, PhD
- Phyllis Warkentin, MD

1:00pm – 4:00pm  
**Inspector’s Training Workshop**  
Salon M, 3rd Floor  
*Speakers:*
- Cal Stone, MS, CHS
- John Schmitz, PhD, F(ACHI)
- Julie Houp, MS, CHS
- Melissa Weeks

5:00pm – 6:00pm  
**First Time Attendees & New Members Reception (By invitation only)**  
Conference 20 - 22, 3rd Floor

6:00pm – 7:00pm  
**Opening Session: Creating Solutions for Complex Patients = HLA and Clinical Team Work**  
Salon I, 3rd Floor  
*Moderators:*
- Cathi Murphey-Half, MS, PhD HCLD/CC(ABB), A(ACHI)
- James Lan, MD, FRCPC, F(ACHI)

*Speakers:*
- Adam Bingaman, MD, PhD

Tuesday, October 17, 2023

6:45am – 8:00am  
**Volunteer Breakfast (By Invitation only)**  
Conference 1 – 2, 3rd Floor

7:00am – 7:30pm  
**Registration**  
Salon Foyer, 3rd Floor
8:00am – 8:30am  
**Service Awards: J. Marilyn MacQueen Rising Star Award, Distinguished Service Award, and Outstanding Technologist Award**  
*Salon I, 3rd Floor*

**Moderators:**
- David Kiger, CHS (ACHI)
- Ruth Koester, PhD, F(ACHI)

**Awardees:**
- Alphonce Kioko Mweleli, MSc, MLT
- John Schmitz, PhD, F(ACHI)
- Rachel Wahlert, MS, CHS (ACHI)

8:30am – 9:30am  
**Keynote Address: Human Tissue Immunity Across the Lifespan**  
*Salon I, 3rd Floor*

**Moderators:**
- William Hildebrand, PhD, F(ACHI)
- Elaine Reed, PhD, F(ACHI)

**Speaker:**
- Donna Farber, PhD

9:30am – 10:00am  
**AM Break with Exhibits**  
*Salon E, 3rd Floor*

10:00am – 10:30am  
**Scholar Award Presentations**  
*Salon I, 3rd Floor*

**Moderators:**
- Kelley Hitchman, MS, PhD, F(ACHI)
- Eric Weimer, PhD, D(ABMLI) F(ACHI)

**Crosstalk between HLA Class I and TLR4 Mediates Pro-Inflammation Signaling Cascades in Endothelial Cells via TLR4/MyD88 Pathway**  
Yi-Ping Jin, MD

**Substitution of Glutamic Acid at Position 71 of DRB1*04:01 Eliminates Collagen Sensitivity without Inducing Alloreactivity**  
Christina Roark, PhD, F(ACHI)

10:30am – 12:00pm  
**Plenary I: Big Data, Big Science: High Resolution Interrogation of Human Immune Responses**  
*Salon I, 3rd Floor*

**Multi-omic Profiling of Immunity to Infectious Disease**  
Joann Arce, PhD

**Single cell/CTYOY Immunophenotyping in Transplant Rejection**  
Sheri Krams, PhD

**Radiomics to Pathomics: Converting Images into Precision Medicine**  
Kyle Lafata, PhD

12:00pm – 12:15pm  
**Transition**

12:15pm – 2:05pm  
**Thermo Fisher Scientific:** Enhancing the Pre-Transplant Testing Approach: Novel Tools and Complementary Solutions  
*Salon I, 3rd Floor*

**CareDx:** Future of Transplant Solutions: Innovation Across the Pre and Post-Transplant Journey  
*Salon M, 3rd Floor*

**GenDx:** User’s Perspective on New Technologies: HLA Typing using Nanopore & Chimerism Monitoring with NGS  
*Pearl 2 - 3, 2nd Floor*

2:05pm – 2:15pm  
**Transition**
2:15pm – 3:45pm  
**Abstract Session I: Diverse Discoveries: HLA Buffet**  
*Pearl 2 - 3, 2nd Floor*

**Moderators:**  
Kelley Hitchman, MS, PhD, F(ACHI)  
Jay Slack, MB(ASCP), CHT

**Presumed or Functional Epitope: The Need for Confirmation with Cell-Based Assays**  
Qingyong Xu, PhD, F(ACHI)

**Estimating Rates of Immunologically Incompatible Organ Offers Caused by Use of Antigen-Level Deceased Donor HLA Typing for Allocation**  
Loren Gragert, PhD, A(ACHI)

**Toward a Combined DR+DQ HLA Molecular Mismatch Score for Risk Stratification of Pediatric Heart Transplant Patients**  
Mitchell Ellison, PhD

**Impact of Induction on Acute Rejection in Kidney Transplant Recipients with High and Low Risk Class II Eplet Mismatches**  
Jenny Tran, PhD

**HLA Common Null Allele Detection Using a Fast and Easy CRISPR-Cas Assay**  
Sake van Wageningen, PhD

2:15pm – 3:45pm  
**Abstract Session II: Clinical Research Innovations in Transplantation**  
*Salon M, 3rd Floor*

**Moderators:**  
Omar Moussa, PhD, F(ACHI)  
Cheryl Nasse, MS, CHS (ACHI)

**Circulating T Follicular Helper Cells are Present and Correlate with Antibody-Secreting B Cells in Liver Transplant Patients with Ischemia-Reperfusion Injury**  
Adil Bhat, PhD

**Effector Memory and Th17 CD4+ T Cells are Increased in Liver Transplant Patients Experiencing Ischemia-Reperfusion Injury**  
Adil Bhat, PhD

**Detection of Circulating HLA-E in Cancer Patients: Potential Applications in Cancer Immunotherapy**  
Varun Kanangat

**A Comparison of Human Leukocyte Antigen Antibody Profiles between Circulating and Reactivated Memory B Cells**  
Melody Cheong, PhD

**Interrogating DSA IgG Characteristics and Effector Functions in Lung Transplant Recipients**  
Melissa Harnois, PhD Candidate

**Donor Endothelial Activation by Serum from Mismatched Recipients**  
Qiang Shi, PhD, CLS (ASCP)
2:15pm – 3:45pm

**Workshop 1: Back to Basics: Adaptive vs. Innate Immunity**

*Moderators:*
Michael Gautreaux, PhD, F(ACHI)
Walter Herczyk, BS, MT(ASCP), CHS(ACHI)

**The Tip of the Spear: Innate Cells as the First Responders in Immunity**
Nicole Valenzuela, PhD, F(ACHI)

**Adaptive Immunity Defining Specificity and Pathogenicity**
Anita Chong, PhD

3:45pm – 4:15pm

**PM Break with Exhibits**

4:15pm – 5:45pm

**Abstract Session III: Insights into HLA Structure and Function**

*Moderators:*
Anne Halpin, MLT, MSc, PhD, CHS(ACHI)
Ruby Siegel, PhD, CHS (ACHI)

**HLA-L Pseudogene as a Potential MicroRNA Sponge for Regulation of HLA-B**
Nilesh Chitnis, PhD

**The Transcriptional Repressor BCL6 Selectively Restrains Expression of HLA Class II and Antigen Presentation Machinery in Endothelial Cells**
Nicole Valenzuela, PhD, F(ACHI)

**HLA-DQ Promiscuity across Loci?**
Alessandra Armstrong Antunes

**Characterization of HLA Expression on Memory-Like (ML) NK Cells**
Martin Maiers, MS

**Extensive Organ-Specific Heterogeneity of HLA Expression in Endothelial Cells**
Nicole Valenzuela, PhD, F(ACHI)

**Differential Pairing of Transmembrane Domain GxxxG Dimerization Motifs Generates Two HLA-DR Conformers Defined by Selective Binding by the mAb Tü36**
Amy Hahn, PhD, F(ACHI)

4:15pm – 5:45pm

**Workshop 2: DSA Monitoring: One Size Might Not Fit ALL**

*Moderators:*
Linda Buckert, MT(ASCP)SBB, CHS(ACHI)
Jessica Gugliuzza, MLS(ASCP-cm), CHT(ACHI)

**DSA Monitoring: One Size Does Not Fit All**
Luis Hidalgo, PhD, F(ACHI)

**The Clinical Impact of DSA in Transplant Recipients Pre- and Post-Transplant**
Carrie Schinstock, MD

**Biopsy and Non-Invasive Monitoring for Allograft Rejection**
Michelle Hickey, PhD, D(ACHI)
4:15pm – 5:45pm  **Workshop 3: Bioinformatics Tools for Clinical Applications**  
**Moderators:**
Thanh-Mai Bui, BS, CHS (ACHI)
Melody Zhang, MD, A(ACHI)

**Introduction to Bioinformatics Concepts for Clinical Lab Management**
Nicholas Brown, PhD, F(AACHI)

**Understanding and Applying PIRCHE Epitope Matching in Clinical Transplantation**
Matthias Niemann, MSc

**Imputation: Friend or Foe?**
Abeer Madbouly, PhD

6:00pm – 8:00pm  **Poster Reception**  
Salon E, 3rd Floor

6:00pm – 7:00pm  **International Reception** *(By invitation only)*  
Conference 3 – 4, 3rd Floor

6:30pm – 7:30pm  **Directors in Training Reception** *(By invitation only)*  
Conference 17, 3rd Floor

6:30am – 8:00am  **GenDx Tulip Run**  
Convention Center

7:30am – 5:45pm  **Registration**  
Salon Foyer, 3rd Floor

8:30am – 9:30am  **The Rose Payne Award & Lecture**  
Moderator: Luis Hidalgo, PhD, F(AACHI)
Salon I, 3rd Floor

**HLA-DQ Immunogenicity – Pathways to Explore**
Anat Tambur, DMD, PhD, D(ABHI), FAST

9:30am – 10:00am  **AM Break with Exhibits**  
Salon E, 3rd Floor

10:00am – 10:30am  **STIC Awards: Early Career Investigator Award, Innovation Scholarship Award, Michael Schmiederer Research Support Award**  
**Moderators:**
Nicole Valenzuela, PhD, F(AACHI)
Melody Zhang, MD, A(ACHI)

**Awardees:**
Esme Dijke, PhD, F(AACHI)
Aleksandar Senev, MD, PhD, F(EBTI)
Eszter Lazar-Molnar, PhD, F(AACHI), D(ABMLI)
10:30am – 12:00pm

**Plenary II: MHC Genomics – How Evolutionary Diversity of the MHC May Have Clinical Relevance**

*Salon I, 3rd Floor*

**Moderators:**
Matthew Anderson, MD, PhD, A(ACHI), FCAP
Martin Maiers, MS

**How Matched is a MUD? MHC Comparisons in Unrelated HCT**
David Sayer, PhD

**Human Pangenomic Graph Analysis for the MHC**
Jason Chin, PhD

**MHC Genomic Diversity and HCT Donor Selection**
Satu Koskela, PhD

12:00pm – 12:15pm

**Transition**

12:15pm – 2:05pm

**Thermo Fisher Scientific: Advancing HLA Lab Workflow Solutions: Shaping Post-Transplant Monitoring**

*Salon I, 3rd Floor*

**Immucor: Exploring New Frontiers in Transplantation Testing**

*Salon M, 3rd Floor*

**Omixon: Exploring Innovative Technological Solutions of Pre- and Post-Transplant Diagnostics**

*Conference 1 – 4, 3rd Floor*

**CareDx: Future of Transplant Solutions: Innovation Across the Pre and Post-Transplant Journey**

*Pearl 2 – 3, 2nd Floor*

2:05pm – 2:15pm

**Transition**

2:15pm – 3:45pm

**Workshop 4: Machine Learning Applications in Transplantation**

*Pearl 2 – 3, 2nd Floor*

**Moderators:**
Caleb Cornaby, PhD, F(ACHI)
Abeer Madbouly, PhD

**Intro to ML Applications in Transplantation and More**
Eric Weimer, PhD, D(ABMLI), F(ACHI)

**Machine Learning Methods for Evaluating Graft Failure Risk in Kidney Transplantation**
Ryan Urbanowicz, PhD

**HCT Survival Models for Multiple Match Scenarios**
Deniz Akdemir, PhD

2:15pm – 3:45pm

**Workshop 5: HLA Antibody Testing Workflow – Do All Roads Really Lead to Rome?**

*Salon I, 3rd Floor*

**Moderators:**
Carey Killion, BS, MT(ASCP), CHS(ACHI)
Jeremy Sherrill, BS, CHS (ACHI)

**HLA Antibody Analysis in Transplantation: Standardization, Methods, Comparative Approaches and The Future...**
Phillip Fisher, CHS (ACHI)

**Keeping Up with the Times: Implementing Changes to Outdated Antibody Testing Workflows to Improve Risk Assessment for Transplant Candidates and Recipients**
Rebecca Sosa, PhD, F(ACHI)

**Many Roads Leading to the Same Place: Different Approaches to HLA Antibody Testing for Safe and Efficient Transplantation**
John Lunz, PhD, F(ACHI)
Abstract Session IV: Data Alchemy: Translating HLA Insights through Bioinformatics  

Salon M, 3rd Floor

Moderators:
Loren Gragert, PhD, A(ACHI)
Benedict Matern, PhD

A Computational HLA Allele-Typing Protocol to De-Noise and Leverage Nanopore Amplicon Data
Jalal Siddiqui, PhD

HLA Genotype Imputation Results in Largely Accurate Epitope Mismatch Risk Categorization across Racial Groups
Scott Krummey, MD, PhD

Identification of DRB1 and DQB1 Amino Acid Variability within Serologic Antigen Groups
Nicholas Brown, PhD, F(ACHI)

The Accuracy of Eplet Mismatching Using Imputed Intermediate Resolution HLA Typing
Shili Ge, MD, PhD

Global Coverage for iPSC Banks: Balancing Equity and Volume
Martin Maiers, MS

Bioinformatic Segregation of Chimeric Libraries Enables Accurate Donor HLA Typing from Allograft Biopsies by ONT
Yang Li, MD, PhD

Workshop 6: Selecting a Bone Marrow Donor: An Evidence Based Approach

Conference 1 – 4, 3rd Floor

Moderators:
Marcelo Fernandez-Vina, PhD
Rachel Wahlert, MS, CHS (ACHI)

HCT Unrelated Donor Selection: Current NMDP/CIBMTR Guidelines & Emerging Trends
Medhat Askar, MD, PhD, F(ACHI), FRC(Path)

Traveler’s Guide to NMDP Resources and Tools
Stephanie Lerach, MS

Real-World Use Cases: HCT Donor Selection in Different Clinical Scenarios
Melissa Glenn, BS, CHT (ACHI)

3:45pm – 4:15pm
PM Break with Exhibits
Salon E, 3rd Floor

4:15pm – 5:15pm
Director’s Forum
Salon I, 3rd Floor

Speakers:
Sara Dionne, PhD, F(ACHI)
Gerald P. Morris, MD, PhD
Nicole Valenzuela, PhD, F(ACHI)
Annette Jackson, PhD, F(ACHI)
Scott Krummey, MD, PhD, A(ACHI)

4:15pm – 5:45pm
Technologist’s Forum
Salon M, 3rd Floor

Speakers:
Runying Tian, MS, CHS (ACHI)
Sandra Tafulo, PhD
Phillip Fisher, CHS, (ACHI)
Doreen Sese, CHS (ACHI)
**STAR Report**

**Moderators:**
Nicole Valenzuela, PhD, F(ACHI)
Anat Tambur, DMD, PhD, D(ABHI)

*The Role of Non-HLA Antibody Testing in Solid Organ Transplantation*
Michelle Hickey, PhD, D(ACHI)

*Measuring Levels of HLA Antibodies to Assess Efficacy of Antibody Removal Therapy*
Carrie Schinstock, MD

*Review of Primary and Memory Alloimmune Responses and HLA Antibody Attributes*
Howard Gebel, PhD, F(ACHI)

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**Thursday, October 19, 2023**

7:30am – 5:30pm  **Registration**
Salon Foyer, 3rd Floor

6:45am – 7:45am  **Women in Transplantation: Achieving Equality for Women in their Career and Compensation in Industry and Academia**
Salon M, 3rd Floor

**Speaker:**
Nicole Brockway, MBA

8:00am – 9:30am  **The Paul Terasaki Clinical Science Award & Lecture and The Bernard Amos Distinguished Scientist Award & Lecture**
Salon I, 3rd Floor

**Moderators:**
Marcelo Fernandez-Vina, PhD
Adriana Zeevi, PhD

*From HLA-centric to Integrative Approach in Solid Organ Transplantation*
Carmen Lefauveur, Professor

*The Multitude of Aspects of HLA Sensitization*
Sebastiaan Heidt, PhD

9:30am – 10:00am  **AM Break with Exhibits**
Salon E, 3rd Floor

10:00am – 10:30am  **Scholar Award Presentations**
Salon I, 3rd Floor

**Moderators:**
Kelley Hitchman, MS, PhD, F(ACHI)
Eric Weimer, PhD, D(ABMLI) F(ACHI)

*Endothelial Cells Exhibit an Imbalance in Classical, Non-Classical and Accessory HLA Molecule Expression*
Nicole Valenzuela, PhD, F(ACHI)

*Site-Directed Mutagenesis of HLA-DQ Molecules Reveals the Amino Acids Crucial for Binding to Human Monoclonal HLA-Specific Antibody*
Cynthia Kramer, PhD
10:30am – 12:00pm

**Plenary III: The Evolving Understanding of Innate Immunity: Leopards do Change their Spots**

*Salon I, 3rd Floor*

**Moderators:**
Elaine Reed, PhD, F(ACHI)
Nicole Valenzuela, PhD, F(ACHI)

*Innate Allorecognition and Formation of Memory in the Myeloid Compartment*
Aravind Cherukuri, MD, PhD

*NK Cell Mechanisms of Injury in Lung Transplantation*
Daniel Calabrese, MD

*Endothelial Injury: Crosstalk with Inflammatory Signaling*
Marie-Josee Hebert, MC, FRCPC, FCAHS

12:00pm – 12:15pm

**Transition**

12:15pm – 2:05pm

**Pirche AG: PIRCHE and the Evolution of Molecular Matching**

*Salon I, 3rd Floor*

**Oxford Nanopore Technologies: Deciphering Immunogenetics with Oxford Nanopore Technologies**

*Salon M, 3rd Floor*

**Stemcell Technologies: Unlocking New Horizons: Exploring the Vitality of Lineage-Specific Chimerism Analysis after HSCT**

*Pearl 2 - 3, 2nd Floor*

2:05pm – 2:15pm

**Transition**

2:15pm – 3:45pm

**Abstract Session V: Immunogenetics in Focus**

*Pearl 2 – 3, 2nd Floor*

**Moderators:**
J. Ryan Pena, MD, PhD, MS, F(ACHI)
Nedal Taha, PhD, S(ACHI)

*The Performance of a Research Hybrid-Capture NGS Assay for High-Resolution HLA Typing*
Manli Shen, PhD

*NGS HLA Typing Reveals Low-Level Maternal T Cell Engraftment through the Detection of an Unexpected DRB4*
Yang Li, MD, PhD

*Use of Multiplexed, Digital PCR to Assess Cellular Chimerism and HLA Loss of Heterozygosity Following Allogeneic Stem Cell Transplantation*
Doug Bost, BA

*A Novel Multiplex Digital PCR Technology for Accurate and Rapid Chimerism Testing*
Rebecca Edwards, PhD

*Technology Advancement in Getting Donor HLA Information from Recipient with Unknown Donor Typing*
Janette Kwok, MBBS, PhD, FRCPA, FHKAM(Pathology), F(ACHI)

*HLA-Typing Using a Long-Read HLA Capture Method Combined with ONT or PacBio Sequencing*
Inge van Rooy, PhD
2:15pm – 3:45pm

**Practical Applications: Featuring the International Scholar Award**

**Moderators:**
Nicholas Brown, PhD, F(ACHI)
Taishan Hu, PhD, F(ACHI)

**Hemagglutination Assay Limits Access to ABO-A2 Kidney Transplantation**
Anne Halpin, MLT, CHS(ACHI), PhD

**Heart after Liver Transplant with Domino Liver (HALT-D) for a High CPRA Patient**
Idoia Gimferrer, MD, PhD, F(ACHI)

**B cell FCXM, We’ve Been Doing It Wrong All Along**
George Vlad, PhD

**Validation of Wipe Testing Using the Alloseq HCT Platform**
Jesse Cox, MD, PhD, A(ACHI)

**A Web-Based Visualization Tool for Asymmetric Linkage Disequilibrium (ALD) between Amino Acid Positions of Classical HLA in Loci in US Populations**
D. Giovanni Biagini, PhD

**Common, Intermediate, Well-Documented and Rare HLA Eplets in the World Population: epCIWDR Version 1.0.0**
Mitchell Ellison, PhD

2:15pm – 3:45pm

**Workshop 7: Best Practices in HLA Antibody Testing and Analysis – The Odyssey Continues:**

**Flexing our Abs to Get to the Core**

**Moderators:**
Annette Jackson, PhD, F(ACHI)
Doreen Sese, CHS (ACHI)

**Introduction**
Rob Liwski, MD, PhD, A(ACHI)

**Best Practice in Antibody Testing, a Medium Sized Lab Approach**
Carey Killion, BS, MT(ASCP), CHS(ACHI)

**Best Practice in Antibody Testing, a Large Sized Lab Approach**
Jennifer Metz, CHS

**Best Practice in Antibody Testing, an International Lab Approach**
Sandra Tafulo, PhD

3:45pm – 4:00pm

**PM Break**

Salon Foyer, 3rd Floor

4:00pm – 5:30pm

**Plenary IV: New Frontiers in Plasma Cell Biology and Desensitization Strategies to Eliminate HLA Antibodies**

**Moderators:**
Scott Krummey, MD, PhD
Olga Timofeeva, PhD, F(ACHI)

**Heterogeneity of Pathogenic HLA-specific Human Bone Marrow Plasma Cells Have Implications in Transplant Desensitization Therapies**
Frances Eun-Hung Lee, MD

**New Approaches to Desensitization: What we Have Learned and Where is it Leading Us?**
Stuart Knechtle, MD

**Fusion Protein Engineering for Antigen-specific Humoral Tolerance**
Chang Liu, MD, PhD, F(ACHI)
Friday, October 20, 2023

7:30am – 11:30am  Registration  Salon Foyer, 3rd Floor

8:00am – 9:00am  Coffee & Compatibility LIVE!  Salon I, 3rd Floor
  Speakers:
  Kelley Hitchman, MS, PhD, F(ACHI)
  Eric Weimer, PhD, D(ABMLI) F(ACHI)

9:00am – 9:15am  IHIWS Update  Salon I, 3rd Floor
  Moderator:
  Annette Jackson, PhD, F(ACHI)
  Speaker:
  Katushi Tokunaga, PhD

9:15am – 9:30am  AM Break  Salon Foyer, 3rd Floor

9:30am – 10:30
  Plenary V: The Evolving Role of ABO in Transplantation  Salon I, 3rd Floor
  Moderators:
  Anne Halpin, MLT, CHS(ACHI), PhD
  William Lane, MD, PhD, A(ACHI)

  ABO Genotyping: The New Frontier
  Cathi Murphey-Half, MS, PhD HCLD/CC(ABB), A(ACHI)

  Donor Selection for Allogeneic Hematopoietic Cell Transplantation and the Role of ABO
  Stephen Spellman, MBS

10:30am – 12:00pm  Closing Session: The use of Molecular Mismatch Load Tools in Transplantation – The Great Debate  Salon I, 3rd Floor
  Moderators:
  Luis Hidalgo, PhD, F(ACHI)
  Anna Morris, PhD

  Panel:
  Sebastiaan Heidt, PhD
  John Killian, MD, PhD
  Peter Nickerson, MD, FRCPC, FCAHS
  Anat Tambur, DMD, PhD, D(ABHI), FAST