



Current Topics in Histocompatibility & Transplantation

A Unique Continuing Education Opportunity

2016 Teleconference Series

Sponsored by

Sandra Rosen-Bronson, PhD, D(ABHI)

Georgetown University

Washington, DC

An ABHI Approved Continuing
Education Program

Current Topics in Histocompatibility and Transplantation for Technologists

This series of twenty interactive lectures, moderated by Dr. Sandra Rosen-Bronson, will reach hundreds of individuals through real-time, ninety minute in-depth audio conferences involving organizations and people from around the world. Without ever leaving your laboratory or office, you can listen to expert scientists and key decision makers thousands of miles away. Additionally, you can ask questions and get immediate answers, as well as listen to other participants' questions. This convenient and cost-effective educational tool will allow you to keep current in the field of histocompatibility testing and transplantation. Each participant will earn ABHI Continuing Education Credit (CEC) equal to 1.5 contact hours or 0.225 CE credits per lecture.

Frequently Asked Questions

How Does a Teleconference Work? Three to five days before each lecture, a teleconference packet is mailed to your site coordinator. The packet will contain the lecture slides as a PowerPoint file and a PDF file, handouts as a PDF file, along with detailed conference instructions all on a CD. At the scheduled time on the day of the lecture, your site must call the telephone number provided in the instructions. U.S. participants receive a toll-free telephone number. International participants may incur additional telephone charges.

All teleconferences are scheduled to start at 1:00 P.M. (Eastern Time) and last approximately ninety minutes. Once the teleconference has begun, participants view the slide show as they listen to the lecturer. There will be an opportunity to participate in a question and answer session at a midpoint and at the end of the lecture.

What If the CD Doesn't Work Properly? If the CD you receive does not function properly, it will be replaced at no charge. As soon as you receive your conference packet, please verify that the CD contains the correct PowerPoint file and that it functions properly in your computer system. If you experience any difficulty with the CD or have a problem opening the files, contact us immediately.

What If We Haven't Received the Packet? If you do not receive your conference packet, please contact us as soon as possible so that we can provide you with the materials.

What Equipment Do We Need On Site? You will need a computer with a monitor and a speakerphone.

How Do We Register? Complete the registration form and fax a copy of the form to (202) 944-2343. Send the original registration form with complete credit card information or a check made payable to Georgetown University to:

U.S. Mail:

Sandra Rosen-Bronson
Box 571438
Georgetown University
3900 Reservoir Road NW
Washington, DC 20057-1438

Overnight Courier:

Sandra Rosen-Bronson
Preclinical Science Bldg, Room LE8H
Georgetown University
3900 Reservoir Road NW
Washington, DC 20007

To ensure your registration is processed, it is important to send it to the **exact address as listed above**.

Cancellation Policy: Cancellations which occur 21 days or more prior to the date of the first lecture for which your site has registered are refundable less a nonrefundable deposit of \$50. For cancellations which occur from 21 to 14 days prior, 50% of the lecture series fee will be forfeited. No refunds are possible within 14 days prior to the starting date. All cancellation requests **must be submitted in writing**.

Further Questions: If you have any questions, please visit our website at www.ctht.info or contact us at:

Tel: (202) 784-5518 or (202) 687-8924

Fax: (202) 944-2343

Email: Andre.Thalberg@georgetown.edu

2016

Teleconference Schedule

All dates are Tuesdays and all lectures begin at 1:00 P.M. (Eastern Time)

May 3, 2016

Diagnosis of Kidney Allograft Rejection: The Nephrologist Perspective

presented by John Friedewald, MD

Northwestern University Feinberg School of Medicine, Chicago, IL

The causes of renal allograft rejection vary and it is often difficult to predict graft outcomes. Participants will learn about the challenge faced by transplant nephrologists in diagnosing graft rejection and determining an optimal treatment plan.

May 17, 2016

Diagnosis of Kidney Allograft Rejection: The Histocompatibility Laboratory's Role

presented by Annette Jackson, PhD, D(ABHI)

Johns Hopkins University School of Medicine, Baltimore, MD

The role of donor-specific HLA antibodies (DSA) in allograft rejection is well established. However, accurate interpretation of DSA specificity and strength, along with close communication with transplant clinicians, is crucial for optimal transplant outcomes. Participants will learn about the laboratory's critical role in guiding diagnosis and treatment of allograft rejection.

May 24, 2016

Diagnosis of Kidney Allograft Rejection: The Pathologist Perspective

presented by Michael Mengel, MD

University of Alberta, Edmonton, Alberta, CA

The diagnosis of allograft rejection requires a team effort. Participants will learn how advanced molecular and biostatistical techniques applied to biopsy specimens may increase diagnostic precision in the area of organ transplantation.

June 7, 2016

HLA Ambiguity Resolution by Next-Generation Sequencing

presented by Alex Lindell, MBA

Associate Director, Market Development, Applied Genomics, Illumina Inc., San Diego, CA

High Resolution, unambiguous HLA typing is challenging due to the highly polymorphic nature of the HLA loci and the high level of sequence homology between these loci. Participants will learn the fundamentals of next-generation sequencing and how this single assay can overcome these challenges to produce unambiguous, ultra-high resolution typing results.

June 21, 2016

Innovative Tools for HLA Epitope Analysis

presented by Semiramis J.H. do Monte, MD

Immunogenetics and Molecular Biology Laboratory, Federal University of Piauí, Teresina, Brazil

Participants will learn how HLA epitope analysis can be useful for understanding antibody specificities and predicting donor-recipient crossmatch results. They will hear about a free software program developed in the speaker's laboratory that is useful for epitope-based virtual crossmatching.

June 28, 2016

Subpopulations of Bone Marrow Plasma Cells

presented by David Allman, PhD
University of Pennsylvania, Philadelphia, PA

Antibody-secreting plasma cells play a key role in allograft rejection. Participants will learn about current studies aimed at understanding the factors underlying plasma cell life spans and why some plasma cells become long-lived, while others do not.

July 12, 2016

The Microbiome as an Immune Modulator

presented by Sivadasan Kanangat, PhD, D(ABHI)
Rush University Medical Center, Chicago, IL

The microbiome is the collection of all the microorganisms living in association with the human body. Recent studies have demonstrated that changes in the composition of our microbiomes correlate with numerous disease states. Participants will learn about how an individual's microbiome can affect alloimmunity and influence transplant outcome.

July 19, 2016

Flow Crossmatch: In Pursuit of Perfection

presented by Robert Liwski, MD, PhD
HLA Typing Laboratory, Queen Elizabeth II Health Sciences Centre, Halifax, Nova Scotia, CA

Several variables can affect the quality of flow cytometric crossmatch results. Participants will learn about ongoing optimization studies conducted in Dr. Liwski's laboratory including the effects of cell isolation technique and cell purity on flow crossmatch results.

July 26, 2016

HLA Diversity in the Era of NGS

presented by Marcelo Fernández-Viña, PhD, D(ABHI)
Stanford University School of Medicine, Stanford, CA

Next-generation sequencing (NGS) is rapidly being adapted as a standard typing method for HLA polymorphism. Participants will learn how the implementation of NGS for HLA typing is impacting clinical histocompatibility testing practice.

August 2, 2016

Basics of the HLA System

presented by Rajalingam Raja, PhD, D(ABHI)
University of California, San Francisco, San Francisco, CA

The Human Leukocyte Antigen (HLA) system plays a critical role in regulating the immune response. As a consequence of its role in immune regulation and exquisite polymorphism, the HLA system plays a key role not only in disease susceptibility but also in clinical transplantation. This beginner level lecture will review the immunobiology of the HLA system.

August 23, 2016

The Basics of KIR-HLA Complexity

presented by Rajalingam Raja, PhD, D(ABHI)
University of California, San Francisco, San Francisco, CA

The interaction between HLA and natural killer (NK) cell-mediated reactions is becoming better understood in the context of stem cell transplantation. Killer immunoglobulin-like receptors (KIR) are encoded by a wide range of alleles that segregate independently from the HLA alleles. This beginner level lecture will review KIR and their role in determining the effector function of natural killer cells.

September 20, 2016

The Challenges of HLA-DP in Deceased Donor Organ Allocation

presented by Robert Bray, PhD, D(ABHI), Howard Gebel, PhD, D(ABHI), and Geoffrey Smith, MD
Emory University, Atlanta GA

HLA-DP typing, as well as accurate virtual crossmatching, for patients with DP antibody can present unique conundrums. Compared with HLA-DR and -DQ, knowledge of allele frequencies and DP serologic specificities is somewhat limited. Participants will learn about DP and the initiatives underway in the transplant community aimed at addressing these issues. They will also hear about a new computer-assisted algorithm for assessing HLA-DPB1 donor/recipient compatibility.

October 11, 2016

Hematopoietic Stem Cell Donor Selection 2016

presented by Jennifer Wilder, RN, BSN, OCN, CHTC
NIH Unrelated Donor Hematopoietic Stem Cell Transplant Program, Bethesda, MD

A growing number of patients in need of hematopoietic stem cell transplant do not have an HLA matched related donor and are being transplanted with alternative donors, including a haplotype matched relative or partially matched unrelated donor. In addition, current data suggest that considering factors such as permissive DP mismatch and KIR receptor may prevent severe GVHD or disease relapse. Participants will learn about current strategies through which the optimal available HSC donor is selected for individual patients.

October 25, 2016

Complement Fixing Antibody Testing in Kidney Transplantation

presented by Gansuud Balgansuren, MD, PhD, D(ABHI)
Seattle Cancer Care Alliance, Clinical Immunogenetics Laboratory, Seattle, WA

The clinical significance of solid-phase antibody tests designed to determine whether or not donor-specific HLA antibodies are complement fixing remains controversial. The speaker will describe the complement activation pathways, will discuss strengths and weaknesses of available test platforms such as CDC, C1q, or C3d, and will review recent clinical studies aimed at evaluating the utility of such assays.

November 1, 2016

Kidney Allocation 2016

presented by Sam Ho, PhD, D(ABHI), Gift of Life Michigan, Ann Arbor, MI

Nearly two years into the new kidney allocation system (KAS), it is clear that the new system has impacted HLA laboratories, OPOs, and transplant centers alike. Participants will learn about how the KAS is changing the practice of all key players, as well as impacting transplant rates and outcomes.

November 8, 2016
NK Cell Responses to HLA Antibodies
 presented by Luis Hidalgo, PhD, D(ABHI)
 University of Alberta Hospitals, Edmonton, Alberta, CA

It is commonly accepted that antibody mediated rejection (AMR) following donor specific HLA antibody development is a major cause of organ allograft loss. Recent clinical evidence suggests that damage to allografts goes beyond complement activation. Participants will learn about the multifaceted immunobiology of AMR and the role of natural killer cells in mediating allograft damage.

November 15, 2016
Matched Unrelated versus Haploidentical Hematopoietic Stem Cell Transplant
 presented by Stephen Spellman, MBS
 Immunobiology & Observational Research, CIBMTR, Minneapolis, MN

Recent advances in HLA haploidentical hematopoietic stem cell transplantation have the potential to significantly shift clinical practice toward preferential selection of haploidentical donors for patients in need of an HSC transplant. Participants will hear about current data comparing the advantages and disadvantages of transplant with a match unrelated donor as opposed to a haploidentical related donor.

November 29, 2016
Virtual Crossmatching in 2016
 presented by
 Dong Li, MD, D(ABHI), Sandra Rosen-Bronson, PhD, D(ABHI), and Olga Timofeeva, PhD, D(ABHI)
 Histocompatibility Laboratory, MedStar Georgetown University Hospital, Washington, DC

Understanding of how to best use available solid phase antibody assays has evolved, as have strategies for virtual crossmatching. Extended high resolution HLA typing, including testing for DP and DQA, along with computer-based tools for interpreting epitope reactivity, often facilitate accurate prediction of donor/recipient flow crossmatch results. Through case examples, participants will learn how to accurately predict flow crossmatch results using the tools currently available.

December 6, 2016
NGS for Beginners
 presented by Medhat Askar, MD, PhD, D(ABHI)
 Baylor University Medical Center, Dallas, TX

Next-generation sequencing (NGS) for HLA typing is rapidly being adopted in clinical HLA laboratories. During this basic level lecture, participants will learn about NGS terminology and the principles, as well as how NGS can be implemented.

December 13, 2016
Solid Phase Antibody Assay Optimization
 presented by Robert Liwski, MD, PhD
 HLA Typing Laboratory, Queen Elizabeth II Health Sciences Centre, Halifax, Nova Scotia, CA

There are currently two primary vendors offering Luminex array-based solid phase antibody assays. Participants will learn about ongoing studies conducted in Dr. Liwski's laboratory aimed at optimizing and evaluating both of these vendors' products. They will hear about findings that may explain why results can vary when a different vendor's kit is used.



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