Pediatric Heart Transplant Summit 2017
“Contemporary Challenges and Future Directions”

An exchange of scientific and clinical expertise.

September 17-19, 2017
Bell Harbor International Conference Center
Pier 66, Downtown Seattle

Hosted by

Seattle Children’s
Course Description
This 3-day scientific and educational event will be a unique opportunity for the pediatric heart transplant community to come together to learn, exchange ideas, network, and refresh our thinking in a more intimate meeting environment.

The meeting format is designed to foster direct interactions between attendees and faculty. The program content will provide fundamental didactic information, as well as the latest updates in the field of pediatric heart transplantation for practitioners at all levels and varied practice settings. We will also highlight current controversies and spotlight the latest science and innovation that are close to clinical application. Small group breakout sessions will allow further concentration and direct exploration of select topics with direct participation by attendees.

Who Should Attend
- Cardiologists
- Cardiothoracic Surgeons
- Transplant Coordinators
- Transplant Physicians
- Intensivists
- Advanced Practice Providers
- Fellows, Residents, Trainees
- Social Workers
- Transplant Administrators
- Nurses, Pharmacists, Nutritionists, Behavioral Health Specialists

Course Location
Bell Harbor International Conference Center
2211 Alaskan Way, Pier 66
Seattle, WA 98121
Acknowledgements
Special thanks to the following companies/organizations for their support of this education event:
- Medtronic
- MedImmune
- Seattle Children’s Hospital
- OTTR
- BloodWorks Northwest
- Transplant Management Group

Parking
The Art Institute parking garage. Map and directions are included at the online registration site.

Lodging
(Limited room block at the following hotel. Please make your own reservations.)
The Edgewater: (adjacent to Bell Harbor Conference Center)
- Conference Group Rates (ends August 22-subject to availability): $349/night waterfront side rooms
- If you wish to book a room outside the 9/17/17-9/18/17 block you will receive a “rate not available message.” Please call the hotel directly and you will receive the best rate available for the shoulder nights.

Course Objectives
Participants will be able to assess and utilize best practices to:
- Develop an integrated understanding of the medical and surgical management of the pediatric patient at all phases of the transplant process
- Discuss current controversies and dilemmas
- Assess the perioperative management of complicated and high risk patients
- Understand the clinical pharmacology of transplant drugs
- Develop a better understanding of the clinical immunology and immunogenetics relevant to heart transplantation
- Extrapolate important adult data that can be applied to children
- Assess long-term complications, outcomes, and challenges
- Evaluate adjunctive care and psychosocial issues to improve quality of life
- Develop better multidisciplinary care models including the transition of care to adult programs
- Identify and discuss current bioethical issues
Course Planners
Yuk Law, MD, Chair
Erin Albers, MD, MSCI
Jonathan Chen, MD
Joshua Friedland-Little, MD
Melina Handley, ARNP
Borah Hong, MD
Pam Hopkins, RN, BSN, CCTC
Jason Hopper Cruz, RN, BSN, CCTC
Mariska Kemna, MD
Kathie Kohorn, CME Co-Manager
Mark Lewin, MD
Sarah Lisinski, RRT, MN, NE-BC
David Michael McMullan, MD
Ndidi Amaka Musa, MD
Cathie Rea, MN
Emily Rice, CME Co-Manager
Paul Warner, PhD, BloodWorksNW

Speakers/Moderators

KEYNOTE: Jon Kobashigawa, MD
Associate Director of the Cedars-Sinai Heart Institute, Director of the Advanced Heart Disease Section, Director of the Heart Transplant Program and Professor of Medicine at Cedars-Sinai

KEYNOTE: Lori West, MD, DPhil
Professor of Pediatrics, Director, Canadian National Transplant Research Program and Tier 1 Canada Research Chair in Cardiac Transplantation at the University of Alberta, Edmonton, Canada, and Former President of the International Society of Heart and Lung Transplantation

Iki Adachi, MD
Assistant Professor of Surgery, Division of Congenital Heart Surgery, Baylor College of Medicine; Co-Director, Mechanical Circulatory Support, Texas Children's Hospital

Linda Addonizio, MD
Director, Program for Pediatric Cardiomyopathy, Heart Failure and Transplantation, Columbia University

Erin Albers, MD, MSCI
Pediatric Cardiologist, Transplantation, Seattle Children’s Hospital

Christopher Almond, MD
Pediatric Cardiologist, Lucile Packard Children’s Hospital Stanford

Dan Bernstein, MD
Pediatric Cardiologist, Alfred Woodley Salter and Mabel Smith Salter Endowed Professor in Pediatrics, Lucile Packard Children’s Hospital Stanford

Charles Canter, MD
Lois B. Tuttle and Jeanne B. Hauck Chair in Pediatrics Medical Director, Cardiac Transplant Program, Transplant Center Director, St. Louis Children’s Hospital

Jonathan Chen, MD
Chief, Congenital Cardiac Surgery; Co-Director of the Heart Center; Samuel and Althea Stoum Endowed Chair in Pediatric Cardiovascular Surgery, Seattle Children’s Hospital
Clifford Chin, MD  
Co-Director, Advanced heart Failure and Cardiomyopathy, Cincinnati Children’s

Lisa Chinn, LMHC, CDP  
Chemical Dependency Counselor, Adolescent Medicine, Seattle Children’s Hospital

Richard Chinnock, MD  
Pediatrics, Pediatric Heart Transplant, Loma Linda University International Heart Institute

Jason Hopper Cruz, RN, BSN, CCT  
Certified Transplant Coordinator, Pediatric Heart Transplant Program, Seattle Children’s Hospital

Kevin Daly, MD  
Pediatric Cardiology, Children’s Hospital of Boston

Kate Debiec, MD  
Adolescent Medicine, Pediatric and Adolescent Gynecology, Differences in Sex Development, Vascular Anomalies, Seattle Children’s Hospital

Melanie Everitt, MD  
Director of Pediatric Heart Transplant, Children’s Hospital of Colorado

Brian Feingold, MD  
Medical Director, Heart Failure and Heart Transplant Programs, Children’s Hospital of Pittsburgh

Maricel Floresca, Social Worker  
Heart Transplant Clinic, Seattle Children’s Hospital

Joshua Friedland-Little, MD  
Pediatric Cardiologist, Seattle Children’s Hospital

Borah Hong, MD  
Pediatric Cardiologist, Transplantation, Seattle Children’s Hospital

Pamela Hopkins, RN, BSN, CCTC  
Pediatric Heart Transplant Coordinator, Seattle Children’s Hospital

Daphne Hsu, MD  
Chief, Division of Pediatric Cardiology; Co-Director, Pediatric Heart Center, Children’s Hospital at Montefiore

Annette Jackson, PhD, D(ABHI)  
Director, Division of Immunogenetics and Transplantation Immunology, John’s Hopkin’s Medicine

Jon Kaltman, MD  
Branch Chief, Division of Cardiovascular Sciences, NHLBI, NIH

Mariska Kemna, MD  
Pediatric Cardiologist, Seattle Children’s Hospital

Steven Kindel, MD  
Program Director, pediatric Heart Failure and Heart Transplant Program, Children’s Hospital of Wisconsin

Richard Kirk, MD  
Pediatric Cardiology, UT Southwestern Children’s Medical Center

Yuk Law, MD  
Medical Director, Cardiac Transplant/Heart Failure Service, Seattle Children’s Hospital

Mark Lewin, MD  
Division Chief, Cardiology; Co-Director, Heart Center; Director, Prenatal Diagnosis and Treatment Program; Thomas Bradley Armstrong Endowed Chair in Pediatric Cardiology, Seattle Children’s Hospital

Mithya Lewis-Newby, MD, MPH  
Program Director, Cardiac Critical Care Fellowship, Bioethics, Seattle Children’s Hospital
David Magnus, PhD  
Thomas A. Raffin Professor in Medicine and Biomedical Ethics, Pediatrics-Center for Biomedical Ethics, Stanford

William Mahle, MD  
Chief, Children’s Healthcare, Atlanta Sibley Heart Center

Jim Mckeever, PhD  
Pediatric Psychology, Psychiatry and Behavioral Medicine, Seattle Children’s Hospital

D. Michael McMullan, MD  
Surgical Director, Cardiac Transplant; Director, Mechanical Cardiac Support and ECLS Services, Seattle Children’s Hospital

Ndidiamaka Musa, MD  
Pediatric Critical Care, Seattle Children’s Hospital

David Naftel, PhD  
Director of INTERMACS, University of Alabama at Birmingham

Tom Nemeth, PharmD  
Pharmacy Clinical Supervisor, Surgery/Solid Organ Transplant, Seattle Children's Hospital

Elfriede (Elfi) Pahl, MD  
Medical Director, Heart Transplant Program, Lurie Children’s Hospital of Chicago

Susan Park, CPNP, MSN, CCTC  
Heart Transplant Coordinator, Phoenix Children’s Hospital

Biagio (Bill) Pietra, MD  
Medical Director Pediatric Cardiac Transplant Program, Denver Children’s Hospital

Jack Price, MD  
Pediatric Cardiovascular Intensive Care Fellowship - Heart Failure/Cardiac Transplant, Baylor College of Medicine

Joseph Rossano, MD, MS, FAAP, FACC  
Executive Director of the Cardiac Center and Medical Director of the Pediatric Heart Failure and Transplant Program, Children’s Hospital of Philadelphia

Claudia Sassano-Miguel, RD  
Registered Clinical Dietician, Seattle Children’s Hospital

Kurt Schumacher, MD  
Pediatric Cardiology, C.S. Mott Children’s Hospital

Robert Shaddy, MD  
Professor and Chair, Department of Pediatrics, Keck School of Medicine of USC, Senior Vice President of Academic Affairs, Children’s Hospital Los Angeles

Jon Snyder, PhD  
Director of Operations and Senior Epidemiologist for the Scientific Registry of Transplant Recipients (SRTR)

April Stempien-Otero, MD, FACC  
Associate Program Director for Research, Cardiology Fellowship, Craig Tall Family Endowed Chair in Heart Failure Research, Attending Physician, University of Washington Medical Center

Thor Wagner, MD  
Pediatric Infectious Disease, Seattle Children’s Hospital

Paul Warner, PhD  
Director and D (ABHI), Immunogenetics/HLA Laboratory, BloodWorks NW

Steven Webber, MBChB, MRCP  
James C. Overall Professor and Chair of the Department of Pediatrics, Vanderbilt University
Accreditation
Seattle Children’s is accredited by the Washington State Medical Association to provide continuing medical education for physicians.

Seattle Children's designates this live educational activity for a maximum of 15.6 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the criteria for up to 15.6 hours of Category I CME credit to satisfy the relicensure requirements of the Washington State Medical Quality Assurance Commission.

Applying for CEPTCs through ABTC.

Acknowledgements
Special thanks to the following organizations and companies for their support of this education event:

- Alexion
- BloodWorks Northwest
- CareDx
- Children’s Cardiomyopathy Foundation
- LifeCenter NW
- MedImmune
- Medtronic
- OTTR
- Seattle Children’s Hospital
- Transplant Management Group
**PROGRAM AGENDA**

**Sunday, September 17**

4:00 pm  Registration

4:30 pm  Welcome & Introduction  
*Jonathan Chen, MD and Mark Lewin, MD*

**Moderators:** Yuk Law, MD; Mariska Kemna, MD

4:45 pm  KEYNOTE: Application of the Knowledge and Innovation from the Adult Population to Pediatric Heart Transplantation  
*Jon Kobashigawa, MD*

5:35 pm  Q & A

5:45 pm  Adjourn

6-7:30 pm  Wine & Cheese Reception; POSTER SESSION (author attended, moderated)  
*Harbor Room*

**Moderators:** Joshua Friedland-Little, MD; Borah Hong, MD; Jon Kobashigawa, MD

**Monday, September 18**

7:30 am  Continental Breakfast and Sign-In

8:00 am  Welcome & Introductions  
*Yuk Law, MD*

**Moderators:** Paul Warner, PhD; Erin Albers, MD, MSCI

8:05 am  KEYNOTE: B Lymphocytes: The "Lesser Known Evil" of the Immune System and What Clinicians Can Incorporate Into Their Practice  
*Lori West, MD, DPhil*

8:55 am  Q & A

**Session One: Controversies in the Evaluation and Waitlist Phase**

**Moderators:** D. Michael McMullan, MD; Jon Kobashigawa, MD

9:10 am  So What Does Risk as Calculated by the Statistician Really Mean for the Clinician?  
*David Naftel, PhD*

9:35 am  The Management and Timing of Listing a Failed Fontan Patient for Transplant of the Heart Alone  
*Kurt Schumacher, MD*

10:00 am  Medical Therapy vs. Mechanical Circulatory Support: When to Ask for a Bail Out?  
*Christopher Almond, MD*

10:25 am  Medical and Surgical Strategies to Mitigate Risks that Can Affect Waitlist and Post-Transplant Outcome  
*Clifford Chin, MD*

10:50 am  BREAK (Exhibitors)

**Session Two: Perioperative Management of the Complicated and High Risk Patient**

**Moderators:** Jonathan Chen, MD; Ndidi Amaka Musa, MD

11:10 am  Getting Out of Dodge: Decisions in the Operating Room from Ischemic Time, to Size Mismatch, to Repair of Defects at Transplant  
*D. Michael McMullan, MD*

11:30 am  The Intensivist as a Trapeze Artist: Walking the Tightrope of Graft Recovery, Immunosuppression, and Protecting End Organ Function  
*Jack Price, MD*
11:50 am  Early Immunosuppression Regimens: To Induce or Not to Induce; Steroid is Dead, Long Live Steroids; Want Hairiness or EBV Infection?  
Brian Feingold, MD

12:10 pm  Methods to Detect Rejection in Children in the First Year: Frequent Biopsy for All or Is It Really More Complicated?  
Daphne Hsu, MD

12:30 pm  LUNCH (Exhibitors)

Afternoon Breakout Sessions

1:10 pm  Select One:
- Understanding Drugs Used in Transplant  
  Tom Nemeth, PharmD; Linda Addonizio, MD, Clifford Chin, MD, Borah Hong, MD
- Grownup Issues and Transition to an Adult Program  
  Jason Cruz, RN, BSN, CCTC, Kate Debiec, MD, April Stempien-Otero, MD, FACC, Jim Mckeever, PhD, Maricel Floresca, MSW, Elfriede Pahl, MD
- How to be Successful in Doing Research with Registry Data  
  Melanie Everitt, MD, David Naftel, PhD, Joshua Friedland-Little, MD, Brian Feingold, MD, D. Michael McMullan, MD, Jon Snyder, PhD

2:10 pm  Select One:
- Everything You Always Wanted to Ask About Immunology, ABO-Incompatible Transplant, and the HLA Testing But Were Afraid to Ask  
  Paul Warner, PhD, Lori West, MD, DPhl, Erin Albers, MD, MSCI, Annette Jackson, PhD, D(ABHI)
  Pamela Hopkins, RN, BSN, CCTC, Mariska Kemna, MD, Claudia Sassano-Miguel, RD, Dan Bernstein, MD, Susan Park, CPNP, MSN, CCTC, Thor Wagner, MD
- Behavioral Health Issues in the Transplant Population: The Role of Child Psychology, Adolescent and Addiction Medicine  
  Jim Mckeever, PhD, Lisa Chinn, LMHC, CDP, Kate Debiec, MD, Jason Cruz, RN, BSN, CCTC, Borah Hong, MD

3:10 pm  BREAK (Exhibitors)

Session Three: Long Term Outcome and Its Challenges
Moderators: William Mahle, MD; Joshua Friedland-Little, MD

3:30 pm  What Is the Most Appropriate Life-Long Immunosuppression Regimen in Pediatric Recipients?  
Richard Chinnock, MD

3:55 pm  Options in Treating Recalitrant, Recurrent, and Hemodynamically Compromised Rejection  
Richard Kirk, MD

4:20 pm  How to Spare the Kidneys Without Compromising the Heart  
Charles Canter, MD

4:45 pm  An Update on Epstein-Barr Virus Infection and the Management of Lymphoproliferative Disease  
Thor Wagner, MD

5:10 pm  How Can We Get Families and Adolescents to “Get with the Program?”  
Elfriede Pahl, MD

5:35 pm  ADJOURN

6:30-9:30  DINNER CRUISE
**Tuesday, September 19**

- **7:30 am**  Continental Breakfast and Sign-In
- **8:00 am**  Welcome and Announcements  
  *Yuk Law, MD*

**Session Four: Immunology and Anti-HLA Antibodies in Pediatric Heart Transplantation**  
**Moderators:** Robert Shaddy, MD; Lori West, MD, DPhil

- **8:05 am**  The Modern Approach to HLA Antibody Testing and Its Clinical Interpretation  
  *Paul Warner, PhD*
- **8:30 am**  The Clinical-Immunogenetic-Pathological Correlation in Rejection  
  *Erin Albers, MD, MSCI*
- **8:55 am**  The State of the Art Strategy in Desensitization in Adult and Pediatric Solid Organ Transplantation  
  *Annette Jackson, PhD, D(ABHI)*
- **9:20 am**  A Synthesis of the Immunological and Clinical Know How to Treating Antibody Mediated Rejection  
  *William Mahle, MD*
- **9:45 am**  Wait for that Negative Crossmatch or Take the Ball and Run with Treating Early Antibody Mediated Rejection  
  *Steven Webber, MB ChB, MRCP*
- **10:10 am**  BREAK (Exhibitors)

**Session Five: An Update on Cardiac Allograft Vasculopathy**  
**Moderators:** Elfriede Pahl, MD; Richard Kirk, MD

- **10:30 am**  The Pathophysiology and Natural History of Cardiac Allograft Vasculopathy: Why It Even Exists in Pediatric Recipients?  
  *Kevin Daly, MD*
- **10:55 am**  Diagnosing Cardiac Allograft Vasculopathy from Selective Angiography to Non-Invasive Testing  
  *Mariska Kemna, MD*
- **11:20 am**  Prevention and Intervention After Diagnosis  
  *Joseph Rossano, MD, MS, FAAP, FACC*
- **11:45 pm**  Who, When, and Why Should Patients with Cardiac Allograft Vasculopathy Be Listed for Re-Transplantation?  
  *Steven Kindel, MD*
- **12:10 pm**  LUNCH (Exhibitors)

**Session Six: Contemporary Bioethics Topics in Pediatric Heart Transplantation**  
**Moderators:** Borah Hong, MD; Richard Chinnock, MD

- **1:00 pm**  The Role of the Bioethicist in Pediatric Heart Transplant  
  *Mithya Lewis-Newby, MD, MPH*
- **1:20 pm**  The Justification for Acceptance/Denial for Transplant from the Bioethics Perspective  
  *David Magnus, PhD*
- **1:40 pm**  Is Destination Therapy with Ventricular Assist Device Applicable to Children?  
  *Iki Adachi, MD*
- **2:00 pm**  Where Has Donation After Circulatory Death Gone?  
  *Bill Pietra, MD*
- **2:20 pm**  PANEL Q & A
- **2:40 pm**  BREAK (Exhibitors)
Session Seven: Looking to the Future in Pediatric Heart Transplantation

Moderator: Yuk Law, MD; Jonathan Chen, MD

2:55 pm The New UNOS Pediatric Heart Allocation Policy: An Example of How Big Data is Applied to Policy-Making
Jon Snyder, PhD

3:20 pm An Update on Discovery and Innovation in the Field of Pediatric Heart Transplant
Steven Webber, MB ChB, MRCP

3:45 pm PANEL of EXPERTS: The Future of Pediatric Heart Transplantation
Lori West, MD, DPhil; Steven Webber, MB ChB, MRCP, Dan Bernstein, MD, Christopher Almond, MD, Daphne Hsu, MD, William Mahle, MD, Robert Shaddy, MD, Charles Canter, MD, Jon Kaltman, MD (Skype from NIH)

4:30 pm WRAP-UP & ADJOURN
Yuk Law, MD
Pediatric Heart Transplant Summit 2017

Course Fee: (includes catering, instructional materials and CME credit):

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<th>Early Rate by 8/17/17</th>
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<tr>
<td>Physician General Registration</td>
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<td>Other Health Professionals and Trainees</td>
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<td>Sunday Night Dinner Cruise</td>
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<td>Additional Dinner Guest</td>
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Online registration ONLY at:  
https://www.regonline.com/PedsHeart2017

PRE-REGISTRATION REQUIRED by 12 pm PST September 13, 2017. No registration at the door.

Please select:

WORKSHOPS: MONDAY, Sept. 18, 2017

1:10 pm  Select One:

☐ Understanding Drugs Used in Transplant
☐ Grownup Issues and Transition to an Adult Program
☐ How to be Successful in Doing Research with Registry Data

2:10 pm  Select One:

☐ Everything You Always Wanted to Ask About Immunology, ABO-Incompatible Transplant, and the HLA Testing But Were Afraid to Ask
☐ Behavioral Health Issues in the Transplant Population: The Role of Child Psychology, Adolescent and Addiction Medicine

Cancellation Policy
Once your registration has been processed, requests for cancellations will be made, minus a $50 processing fee, up to September 13, 2017. No refunds will be issued after that date.

Questions - Contacts:
Kathie Kohorn at Kathie.kohorn@seattlechildrens.org  
(206) 987-5379

Emily Rice at Emily.Rice@seattlechildrens.org  
(206) 987-5379