

Cellicon Valley '23: The Future of Cell and Gene Therapies

Wednesday-Friday, June 21-23, 2023 – Hybrid Symposium

Irvine Auditorium and Perelman Quadrangle, 3401 Spruce Street, Philadelphia, PA 19104

presented by Penn's Abramson Cancer Center and Children's Hospital of Philadelphia

Overview

As home to the first FDA-approved cell and gene therapies, Penn Medicine and Children's Hospital of Philadelphia are international leaders who have helped propel Philadelphia into Cellicon Valley, with the University of Pennsylvania ranking 1st among global universities for CAR-T cell patents. CAR T represents a turning point in the history of human medicine, a genuine revolution in our approach to disease within the field of cellular therapy and transplant. The approvals of chimeric antigen receptor (CAR) T cells offers even patients with highly chemo-refractory hematologic malignancies additional treatment options. World experts in CAR T-cellular therapy, hematologic malignancies, and hematopoietic stem cell transplantation (HSCT) have been assembled to discuss the development and implementation of this therapy and weigh in on current applications, best practices, novel strategies and future developments for CAR T cells.

Activity format will provide significant opportunity for interaction with expert faculty and other attendees with the aim of implementing new standards of patient care and understanding new strategies to optimize and improve CAR T cell therapies. Participants will leave with up-to-date, practical information which will have immediate clinical application, and an understanding of critical research initiatives that are rapidly driving this field forward. Research participants will leave with the technical and scientific background on the current state, and where the latest scientific advances may take the field.

Who Should Attend

These activities are intended for both adult and pediatric hematologist-oncologists, medical oncologists, hematologists, hematopathologists, immunologists, immunobiologists, transfusion medicine, researchers, pharmacists, fellows, nurses, nurse practitioners, physician assistants, industry professionals and other healthcare professionals interested in the latest advances in cell and gene therapy. Additionally, patients and their caregivers, family members, advocates and members of the public who may benefit from understanding current innovative approaches to gene and cell therapy are also invited.

Learning Objectives

Upon completion of this symposium, participants should be able to:

- Identify current application of CAR T-cell therapy including: disease indication, accurate patient selection, manufacturing and treatment administration for adult and pediatric patients
- Describe the latest for CAR T-Cell Therapy for T Cell ALL, multiple myeloma and CLL
- List challenges and opportunities for equitable patient access
- Explain the risk of malignancies and curative therapies for hemoglobinopathies
- Identify the current status of globalization of cell and gene therapies
- Describe the latest targets and technologies for CARs
- Define toxicity and its management
- Identify mechanisms of resistance and how to overcome it
- List recent advances in cell therapy for solid tumors
- Describe chimeric antigen receptor T Cells for T Cell malignancies
- Identify the latest evidence based standards in nursing care resulting from the recent advances in cell therapy and transplant:
 - Identify advances in re-treatment
 - List the latest updates in fertility preservation
 - Describe the challenges with navigating and coordination of BMT/cell gene therapies and CAR-T
 - Explain how bispecific antibodies work
 - List standards of care and practice related to cell therapy infusion day
 - Repeat the rationale for nursing to remain current with new and upcoming therapies

AGENDA

Wednesday, June 21, 2023

- 4:00 pm **In-Person: Check-In and Visit Exhibits**
Virtual: Log-In and Visit Virtual Exhibit Hall
- 5:00 pm **WELCOME REMARKS**
[J. Larry Jameson, MD, PhD](#) | University of Pennsylvania
- 5:05 pm **SPECIAL GUEST SPEAKER**
[Siddhartha Mukherjee, MD, DPhil](#) | Columbia University | VOR Biopharma | Immuneel
- 6:00 pm **NETWORKING RECEPTION AND BOOK SIGNING**
- 7:00 pm **Adjourn**

Thursday, June 22, 2023

- 7:00 am **In-Person: Check-In, Visit Exhibits and Breakfast**
Virtual: Log-In and Visit Virtual Exhibit Hall
- 8:00 am **Welcome Remarks**
[Carl H. June, MD](#) | Penn Medicine | Symposium Co-Chair
[John L. Jackson Jr., PhD](#) | University of Pennsylvania
[Joseph W. St Geme, MD](#) | Children's Hospital of Philadelphia
- 8:15 am **KEYNOTE ADDRESS**
Nucleoside-Modified mRNA-LNP Therapies
[Drew Weissman, MD, PhD](#) | Penn Medicine
- 8:45 am **Discussion**
Moderator: [Carl H. June, MD](#) | Penn Medicine | Symposium Co-Chair
- PLENARY SESSION 1: Driving Clinical CAR's**
Moderator: [David L. Porter, MD](#) | Penn Medicine | Symposium Co-Chair
- 9:00 am **3 Second Line DLBCL Studies, What Happened and Why**
[Stephen J. Schuster, MD](#) | Penn Medicine
- 9:20 am **CAR T-Cell Therapy for T Cell ALL**
[David T. Teachey, MD](#) | Children's Hospital of Philadelphia
- 9:40 am **Optimizing Road Conditions to Get Everyone to the Finish Line**
[Krina K. Patel, MD, MSc](#) | MD Anderson Cancer Center
- 10:00 am **Discussion**

PLENARY SESSION 2: Gene Genies - Engineering Immune Effector Cells

Moderator: [Bruce L. Levine, PhD](#) | Penn Medicine | Symposium Co-Chair

10:10 am **Base Editing and Prime Editing: Correcting Mutations that Cause Genetic Disease in Cells, Animals, and Patients**

[David R. Liu, PhD](#) | Broad Institute, Harvard University, and HHMI

10:30 am **Programming Cellular Machines to Sense and Treat Disease**

[Wendell Lim, PhD](#) | University of California San Francisco

10:50 am **TBA**

[Fyodor D. Urnov, PhD](#) | University of California, Berkeley

11:10 am **Discussion**

11:20 am **CONCURRENT SESSIONS**

- 2:45 pm See 2023 Concurrent Sessions pages 6-7

12:30 pm **LUNCH BREAK | VISIT EXHIBITS**

1:30 pm **CONCURRENT SESSIONS continue**

2:40 pm **BREAK | VISIT EXHIBITS**

PLENARY SESSION 3: Covering the Cost of Cell Therapy: Financing and Advocacy

Moderator: [David L. Porter, MD](#) | Penn Medicine | Symposium Co-Chair

3:00 pm **TBA**

[Kevin B. Mahoney, DBA](#) | Penn Medicine

3:20 pm **Provider Solutions - Where We Are and Where We Should Be?**

[Mark Trusheim, MS](#) | NEWDIGS

3:40 pm **Striving for Equitable Access – Challenges and Opportunities**

[Louis J. DeGennaro, PhD](#) | Leukemia & Lymphoma Society

3:55 pm **Discussion**

PLENARY SESSION 4: Global Expansion of CAR T-Cell Therapy

Moderator: [Bruce L. Levine, PhD](#) | Penn Medicine | Symposium Co-Chair

4:05 pm **Costa Rica**

[Román Macaya Hayes, PhD](#) | Costa Rican Social Security System

4:20 pm **Australia**

[Simon Harrison, MBBS, MRCP \(UK\), PhD, FRCPath \(UK\), FRACP](#) | Peter MacCallum Cancer Centre

- 4:35 pm **Middle East**
[Shahrukh K. Hashmi, MD](#) | Mayo Clinic
- 4:50 pm **India**
[Arun Anand, MD](#) | Immuneel
- 5:05 pm **Discussion**
- 5:15 pm **SPECIAL ADDRESS**
The Improbable History of CAR T Cells
[Carl H. June, MD](#) | Penn Medicine | Symposium Co-Chair
- 5:50 pm **Discussion**
- 6:00 pm **COCKTAIL RECEPTION**
- 7:30 pm **Adjourn**

Friday, June 23, 2023

- 7:00 am **In-Person: Check-In, Visit Exhibits and Breakfast**
Virtual: Log-In and Visit Virtual Exhibit Hall
- 8:00 am **WELCOME**
[Alison Wakoff Loren, MD, MSCE](#) | Penn Medicine
[Alexis A. Thompson, MD, MPH](#) | Children's Hospital of Philadelphia | Symposium Co-Chair
- PLENARY SESSION 1: The Next Frontier is Here - Hemoglobinopathies**
Moderator: [Alexis A. Thompson, MD, MPH](#) | Children's Hospital of Philadelphia | Symposium Co-Chair
- 8:15 am **Genome Edited Cell Based Medicines**
[Matthew Porteus, MD, PhD](#) | Stanford University
- 8:35 am **Gene Editing**
[Mitchell J. Weiss MD, PhD](#) | St. Jude Children's Research Hospital
- 8:55 am **Risk of Malignancies and Curative Therapies for Hemoglobinopathies**
[John F. Tisdale, MD](#) | National Heart, Lung and Blood Institute
- 9:15 am **Discussion**
- PLENARY SESSION 2: The Peril and the Promise of Cell Therapy in Solid Tumors**
Moderator: TBD
- 9:25 am **Two-in-One CAR-T Cells for Solid Tumors**
[Marcela V. Maus, MD, PhD](#) | Massachusetts General Hospital

In person and virtual symposium

PennMedicine.org/Cellicon23

- 9:45 am** **CAR-T Cell Therapy for Advanced Prostate Cancer: Clinical trials and tribulations**
[Vivek K. Narayan, MD, MS](#) | Penn Medicine
- 10:05 am** **TBA**
[Crystal L. Mackall, MD](#) | Stanford University
- 10:25 am** **Discussion**
- 10:35 am** **BREAK | VISIT EXHIBITS**
- PLENARY SESSION 3: CAR T Cells Can Cure Patients: What are we waiting for?**
Moderator: TBA
- 10:55 am** **Long Term Data in Lymphoma**
[Frederick Locke, MD](#) | Moffitt Cancer Center
- 11:15 am** **Curative Potential CART for ALL**
[Stephan A Grupp, MD, PhD](#) | Children’s Hospital of Philadelphia | Symposium Co-Chair
- 11:25 am** **Discussion**
- 11:35 am** **BREAK | VISIT EXHIBITS**
- PLENARY SESSION 4: Cell and Gene Academia to Industry Translation**
Moderator: [Lindsey A. George, MD](#) | Children’s Hospital of Philadelphia
- 11:45 am** **Hemophilia Gene Therapy**
[Lindsey A. George, MD](#) | Children’s Hospital of Philadelphia
- 12:05 pm** **Gene Therapy: A Case Study for Disruptive Technology**
[James M. Wilson, MD, PhD](#) | University of Pennsylvania
- 12:25 pm** **Perspectives on CHOP, Spark Therapeutics and AskBio**
[Katherine A. High, MD](#) | Children’s Hospital of Philadelphia
- 12:45 pm** **Discussion**
- 12:55 pm** **CLOSING REMARKS**
Cellicon Valley Co-Chairs
- 1:00 pm** **ADJOURN**
Lunch to Go

11:20 am – 12:30 pm CONCURRENT SESSIONS (70 minutes)

TRACK 1 AM	TRACK 2 AM	TRACK 3 AM	TRACK 4 AM	TRACK 5 AM
<p>Pediatric Medical Care Moderator: Timothy S. Olson, MD, PhD Children's Hospital of Philadelphia</p>	<p>Clinical Operations/Business Operations/Investment Moderator: Mark Duckworth Children's Hospital of Philadelphia</p>	<p>Nursing Keynotes Moderators: Patricia Mangan, MSN, CRNP Penn Medicine Symposium Co-Chair Trish Hankins, RN, CCRC Children's Hospital of Philadelphia Symposium Co-Chair</p>	<p>Present and Future Cell Therapies Moderator: Elizabeth O. Hexner, MD, MSTR Penn Medicine</p>	<p>COMING SOON!</p>
<p>TBA Paul Orchard, MD University of Minnesota Or AT</p> <p>Proteomic Analysis of CRS Caroline Diorio, MD, FRCPC, FAAP Children's Hospital of Philadelphia</p> <p>Novel Approaches Combining Immunosuppression.. (Reverse CART) Bhavya S. Doshi, MD Children's Hospital of Philadelphia</p> <p>Discussion</p>	<p>LEGAL Know Your Cell and Gene Therapy Contracts</p> <p>TBA Joline Miceli Children's Hospital of Philadelphia</p> <p>TBA Denene Wambach University of Pennsylvania</p> <p>Discussion</p> <p>OPERATIONS Best practices (so far) of Developing Cell and Gene Therapy Programs</p> <p>Onboarding New Gene Therapy Products with a Focus on Patient Access TBA Children's Hospital of Philadelphia</p> <p>Expansion into Community Kathleen Cunningham, RN Penn Medicine Emma A. Meagher, MD (from BL & SG) University of Pennsylvania</p> <p>Lancaster General Health Experience Nik Buescher Penn Medicine</p> <p>Discussion</p>	<p>SPECIAL WELCOME Lindsey Zinck, MSN, RN, OCN, NEA-BC Penn Medicine Ellen Tracy, RN, MSN, NEA-BC Children's Hospital of Philadelphia</p> <p>KEYNOTES Modifying CART: Advance in re-treatment Jakub Svoboda, MD Penn Medicine</p> <p>Fertility Preservation Alison W. Loren MD, MS Jill P. Ginsberg, MD</p> <p>Discussion Add nurses Moderator: TBA</p>	<p>Cell Therapies of the Present</p> <p>Toxicity and Toxicity Management (CRS/Prophylactic and Neurotoxicity) Noelle V. Frey, MD, MSCE Penn Medicine</p> <p>CAR T for Multiple Myeloma Edward A. Stadtmauer, MD Penn Medicine</p> <p>CAR T Cells in CLL. Why or Why Not? David L. Porter, MD Penn Medicine Symposium Co-Chair</p> <p>Mechanisms of Resistance? Overcoming Resistance? David B. Miklos, MD, PhD Stanford University</p> <p>Discussion</p>	

1:30 – 2:40 pm (70 minutes)
CONCURRENT SESSIONS continue

<p><u>TRACK 1 PM</u></p> <p>Pediatric Nursing Care Moderator: TBA</p>	<p><u>TRACK 2 PM</u></p> <p>Clinical Operations/Business Operations/Investment Moderator: Robert (Robb) E. Richards, MS, MBA University of Pennsylvania</p>	<p><u>TRACK 3 PM</u></p> <p>Adult Nursing Care Moderator: Patricia Mangan, MSN, CRNP Penn Medicine Symposium Co-Chair</p>	<p><u>TRACK 4 PM</u></p> <p>Present and Future Cell Therapies Moderator: TBA</p>	<p><u>TRACK 5 PM</u></p> <p>COMING SOON!</p>
<p><i>All speakers from Children’s Hospital of Philadelphia</i></p> <p>Navigation and Coordination of These Complex Therapeutics</p> <ul style="list-style-type: none"> BMT/ Cell Gene Therapies Denise Belcher CAR-T Brooke Leibfreid <p>Case Reviews</p> <ul style="list-style-type: none"> VctI NBL CART TBD CART <p>Barbara McGlynn, BSN, RN Samantha Barone, MSN, CPNP-AC, CPHON Diane Baniewicz, RN, MSN, CRNP Colleen Callahan, RN, MSN, CRNP</p> <p>Cell Therapy Infusion Day! TBA</p> <p>Discussion</p>	<p><u>EDUCATION</u></p> <p>How do you Organize/Develop Onboarding of Staff/Sites as Cell and Gene Therapy Expands?</p> <p>TBA Children’s Hospital of Philadelphia</p> <p>TBA University of Pennsylvania</p> <p>Discussion</p> <p><u>QUALITY DEVELOPMENT</u></p> <p>TBA Children’s Hospital of Philadelphia</p> <p>TBA University of Pennsylvania</p> <p>Discussion</p>	<p><i>All speakers from Penn Medicine</i></p> <p>Bispecifics Mary Elizabeth Sanchez, CRNP, MSN Penn Medicine</p> <p>Unmet Needs Rachel Lundberg, PA-C Penn Medicine</p> <p>Case Reviews</p> <ul style="list-style-type: none"> Chronic Graft Versus Host Disease – Linda M. Perry, PA-C Lymphoma – Danielle Land, MSN, CRNP Challenging CART Coordination Case – Elizabeth A. Weber, RN, BSN <p>Discussion</p>	<p><u>Cell Therapies of the Future</u></p> <p>Mesenchymal Stem Cells and Their Exosomes for Gene Delivery Elizabeth J. Shpall, MD MD Anderson Cancer Center</p> <p>More Than Just T Cells: CAR macrophage or gene engineering of stem cells to generate CAR T resistance Saar I. Gill, MD, PhD Penn Medicine</p> <p>Chimeric Antigen Receptor T Cells for T Cell Malignancies Marco Ruella, MD Penn Medicine</p> <p>IMAGEining CARs Michael D. Farwell, MD Penn Medicine</p> <p>Discussion</p>	