# 6th Annual Midwest Conference on Cell Therapy & Regenerative Medicine

Sheraton Overland Park Hotel, Overland Park, KS

### Friday, September 14th (Day 1)

- **7:00 – 7:50**  Registration and Breakfast
- **7:50 – 8:00**  Welcome Remarks  
  *Douglas Girod*

## Session I: Cell-based Approaches for Neurological Diseases

**Moderator: Richard Barohn and Evan Snyder**

- **8:00 – 8:05**  Introduction to session  
  *Richard Barohn*
- **8:05 – 8:25**  The State of the science: A realistic look at stem cells & their potential – The End of the Beginning  
  *Evan Snyder*
- **8:25 – 8:45**  Adult Stem Cells to ameliorate Amyotrophic Lateral Sclerosis  
  *Hiroshi Nishimune*
- **8:45 – 9:05**  Priming neural stem cells to functionally regenerate the spinal cord after injury via a biomaterial-based subcutaneous maturation approach  
  *Nic Leipzig*
- **9:05 – 9:25**  Stem Cell therapies for human spinal cord injury  
  *Maureen Condic*
- **9:25 – 9:40**  Panel Discussion  
  *Barohn, Snyder, Nishimune, Leipzig, Condic*

### Coffee Break: 9:40 – 10:00

## Session II: The Boundless Potential for Discarded Materials

**Moderator: Khalid Shah and Joseph McGuirk**

- **10:00 – 10:20**  Novel Cellular Therapeutics in the Management of Graft versus Host Disease  
  *Joseph McGuirk*
- **10:20 – 10:40**  Development and Clinical Manufacturing of MSCTC-0010  
  *Rupal Soder*
- **10:40 – 11:00**  Wharton’s jelly mesenchymal stromal cell-derived extracellular vesicles and immune regulation  
  *Neil Dunavin*
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>11:00 – 11:20</td>
<td>A review of cellular markers in the neural differentiation of Wharton’s Jelly mesenchymal stem cells</td>
<td>Tyler Bullis</td>
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<td>11:20 – 11:40</td>
<td>Mesenchymal Stem Cells in Acetaminophen-induced liver injury</td>
<td>Anup Ramachandran</td>
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<td>11:40 – 12:00</td>
<td>Next Generation of Cell based Receptor Targeted Therapies for Cancer</td>
<td>Khalid Shah</td>
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<td>12:00 – 12:15</td>
<td>Panel Discussion</td>
<td>McGuirk, Soder, Dunavin, Bullis, Ramachandran, Shah</td>
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**Lunch Break 12:15 – 1:00**

**Session III: Bioengineering**

*Moderators: Cory Berkland and Omar Aljitawi*

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>1:00 – 1:20</td>
<td>Mimicking properties of natural biomaterials as a stem cell niche</td>
<td>Cory Berkland</td>
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<td>1:20 – 1:40</td>
<td>3D printing approaches to creating precise cell microenvironments</td>
<td>Mei He</td>
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<td>1:40 – 2:00</td>
<td>YESCARTA (Axicabtagene Ciloleucel): Overcoming Challenges in Clinical Trials and CMC</td>
<td>Wayne Godfrey</td>
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<td>2:00 – 2:20</td>
<td>An extracellular matrix-based model for ex vivo expansion of umbilical cord blood stem cells</td>
<td>Omar Aljitawi</td>
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<td>2:20 – 2:40</td>
<td>Role of Nanocomposite Hydrogels in Stem Cells and Tissue Repair</td>
<td>Arghya Paul</td>
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<td>2:40 – 3:00</td>
<td>Panel Discussion</td>
<td>Berkland, He, Godfrey Aljitawi, Paul</td>
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**Coffee Break: 3:00 – 3:20**
Session IV: Adult Stem Cells for Veterinary Applications

Moderators: Frank Blecha and Dori Borjesson

3:20 – 3:40  MSC therapies to augment Healing in equine orthopedics: What is the evidence?  Laurie Goodrich

3:40 – 4:00  Activated cellular therapy to eradicate drug-resistant infections and stimulate healing  Valerie Johnson

4:00 – 4:20  Developing stem cell treatments for spina bifida in a naturally occurring disease model  Aijun Wang

4:20 – 4:40  The journey from curing oral inflammation in cats to initiating a human clinical trial  Dori Borjesson

4:40 – 4:55  Panel Discussion  Blecha, Goodrich, Johnson, Wang, Borjesson

Poster Session

5:00 – 6:30  Poster Session  Wine and Cheese

Speakers’ Dinner  7:00pm  Sheraton

Saturday, September 15th (Day 2)

7:00 – 7:55  Registration and Breakfast

7:55 – 8:00  Welcome Remarks  Robert Simari

Session V: New Concepts in Cardiovascular Regenerative Therapy

Moderator: Keith Jones

8:00 – 8:20  Stem Cell derived Extracellular Vesicles as Therapeutics  W. Keith Jones

8:20 – 8:40  Title  Hina Chaudhry

8:40 – 9:00  Novel Approaches for Endogenous Heart Repair  Tamar Mohammed
9:00 – 9:20  Therapeutic potential of exosomes on cardiovascular diseases  
Yaoliang Tang

9:20 – 9:40  Title  
Tarun Chakravarty

9:40 – 10:00  Review of Cell Therapy for Critical Limb Ischemia  
Clay Quint

10:00 – 10:15  Panel Discussion  
Jones, Chaudhry, Mohammed, Tang, Chakravarty, Quint

Coffee Break: 10:15 – 10:30

10:30 – 11:20  Keynote Lecture: Stem Cells, Patients and Medical Responsibility  
Kevin Donovan

11:20 – 11:35  Q&A for K. Donovan

11:35 – 11:40  Introduction of Special Guest Speaker  
Douglas Girod

11:40 – 12:10  Special Guest Speaker  
Kansas Governor, Dr. Jeff Colyer

12:10 – 12:20  Q&A for Gov. Colyer

Lunch Break 12:20 – 1:20

Session VI: Translation and Therapeutic Perspectives

Moderator: Kurt Gunter and Alan Moy

1:20 – 1:40  How Stem Cell Patients Are Getting Up From The Children’s Table  
Doug Oliver

1:40 – 2:00  Developing CRISPR-based gene editing medicines: Addressing questions for the preclinical candidate EDIT-101 to treat Leber’s Congenital Amaurosis Type 10  
Katrine Bosley

2:00 – 2:20  Title  
Marc Hedrick

2:20 – 2:40  Addressing unmet needs in cellular immune oncology: An approach using NKT  
Kurt Gunter
**Session VI**

**2:40 – 3:00**  
A safer pluripotent stem cell - virus-free and oncogene-free induced pluripotent stem cell  
Alan Moy

**3:00 – 3:20**  
Stem Cells for Degenerative Disc Disease - Pipedream or Possibilities?  
Talal Khan and Dawood Sayed

**3:20 – 3:35**  
Panel Discussion  
Oliver, Bosley, Hedrick, Gunter, Moy, Khan, Sayed

**Coffee Break: 3:35 – 3:50**

**Session VII: TBD**

**Moderator: David Prentice and Buddhadeb Dawn**

**3:50 – 4:10**  
Regenerative medicine – challenges and opportunities  
Dan Gincel

**4:10 – 4:30**  
Cell therapy: the encouraging present and promising future  
Buddhadeb Dawn

**4:30 – 4:50**  
Regenerative medicine and the yellow brick road  
David Prentice

**4:50 – 5:05**  
Panel Discussion  
Gincel, Dawn, Prentice

**Adjournment**
Course Director

Buddhadeb Dawn, MD, Professor and Chairman, Department of Internal Medicine, Chief, Division of Cardiovascular Medicine, University of Nevada, Las Vegas School of Medicine, Las Vegas, NV

Course Faculty

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