

# 10<sup>th</sup> Annual RegenMed SA - Conference Program

**THURSDAY, February 8, 2024 – Basic Stem Cell Biology & Tissue Engineering [HEB Ballroom, UTSA]**

8:30 – Welcome: John McCarrey (UTSA)

8:35 – 10:05 – Platform talks – Chair: John McCarrey (UTSA)

8:35-8:55      **Chia (George) Hsu** (UTSA)  
*Targeting PDE10A to enhance neuromuscular recovery after nerve injury*

8:55-9:20      **Bob Clark** (UT Health SA)  
*Novel application of hematopoietic stem cell transplantation for targeted delivery in Parkinson's disease*

9:20-9:40      **Maegan French** (USA-ISR)  
*The impact of plasma on endothelial cell integrity measured by trans-epithelial electrical resistance (TEER)*

9:40-10:05      **Kameel Zuniga** (59<sup>th</sup> Med Wing)  
*3D in vitro skin models employing collagen and keratin hydrogels*

10:05 – 10:25 – Coffee break

10:25 – 12:10 – Platform talks + Poster Teasers – Chair: Christi Walter (UT Health SA)

10:25-10:45      **Kaisha Meyer-Acosta** (UTSA)  
*Unraveling APOE4's impact on neural subtypes in Alzheimer's disease: Insights from 3D brain organoids*

10:45-11:05      **Mingjiang Xu** (UT Health SA)  
*Chromatin-associated LTR RNA m5C oxidation by TET2 regulates HSC function*

11:05-11:25      **Chih-Ko Yeh** (UT Health SA)  
*Tissue-specific extracellular matrix induction of mesenchymal stem cells for salivary gland regeneration*

11:25-11:50      **Zachary Jordan** (UTSA)  
*A novel Ddx4-dependent iDT-A transgenic mouse facilitates germline-restricted lineage ablation*

11:50 – 12:10 – Poster teasers & Sponsor presentations

12:10 – 1:00 – Lunch (provided)

1:00 – 2:40 – Platform talks – Chair: Jian Ling (SwRI)

- 1:00-1:20 **Alisa Isaac** (UTSA)  
*Drug delivery, inflammation and the microbiome – key players in restoring the upper airway after intubation injury or burns*
- 1:20-1:40 **Marcel Daadi** (UT Health SA)  
*Allogeneic iPS cell-based therapy for Parkinson's disease*
- 1:40-2:00 **Jake Gray** (USA-ISR/UTSA)  
*Modeling trauma-related endothelial dysfunction via in vitro microfluidics*
- 2:00-2:20 **Erika Tatiana Camacho** (UTSA)  
*Investigating metabolism & oxidative stress in photoreceptor degeneration through mathematics*
- 2:20-2:40 **Olivia Tran** (USA-ISR)  
*Gene expression signature of leukocytes in a combination injury from ionizing radiation and trauma*

2:40-3:00 – Coffee break

3:00 – 4:00 – Platform talks – Chair: Adam Meledeo (USA-ISR)

- 3:00-3:20 **Marina Silveira** (UTSA)  
*Neuropeptide Y signaling regulates recurrent excitation in the auditory midbrain*
- 3:20-3:40 **Kristo Nuutila** (USA-ISR)  
*Regeneration-promoting GelMA scaffold for the treatment of skin wounds and volumetric muscle loss*
- 3:40-4:00 **Jeffrey Vedanayagam** (UTSA)  
*From self-interest to survival: Tracing the evolution of selfish genes in the germ line*



**4:00 – 5:00 – Keynote Lecture #1**

4:00-4:05 – Introduction of Dr. Jacques Galipeau  
– Adam Meledeo (USA-ISR)

4:05-5:00 – **Jacques Galipeau**  
University of Wisconsin

***A Unifying Theory for MSC Therapeutic Potency  
in Regenerative Medicine Applications***

Jacques Galipeau, M.D. FRCP(C) is the Don and Marilyn Anderson Professor of Oncology within the Department of Medicine and UW Carbone Comprehensive Cancer Center at the University of Wisconsin in Madison, and is Associate Dean for Therapeutics Development at the University of Wisconsin School of Medicine & Public Health. He is the director of the University of Wisconsin Advanced Cell Therapy Program whose mission is to develop personalized cell therapies for immune and malignant disorders and to promote and deploy first-in-human clinical trials of UW cell therapy innovations to improve outcomes for children and adults. Dr. Galipeau leads a research program in the study and use of mesenchymal stromal cells as an immunotherapy of catastrophic illnesses including cancer and immune disease. He has also developed the field of fusion engineered cytokines known as fusokines, as a novel pharmaceutical means of treating immune disorders and cancer. He is an internationally recognized expert in translational development of cellular pharmaceuticals and the sponsor of a series of FDA-sanctioned clinical trials examining the use of personalized cell therapies.

5:00 – 7:00 – **Poster session & Networking reception**

**FRIDAY, February 9, 2024 – Clinical Applications & Technology Transfer [Denman Room, UTSA]**

8:30 – 10:15 – Platform talks – Chair: Jack Hutcheson (59<sup>th</sup> Med Wing)

8:30-8:50      **Maryanne Herzig** (USA-ISR)  
***Analysis of extracellular vesicles from mesenchymal stromal cells grown in a novel perfusion-based bioreactor***

8:50-9:10      **Vaida Glatt** (UT Health SA)  
***Biomimetic hematoma: A novel treatment strategy for bone healing***

9:10-9:30      **Nicholas McMahon** (SwRI)  
***Overcoming the challenges of manufacturing induced pluripotent stem cells for regenerative medicine***

9:30-9:50 **Heather Hanson** (BioMed SA)  
*The Texas ARPA-H Hub*

9:50-10:15 **Samir Lakhashe** (Scorpius BioManufacturing, Inc)  
*Hitting the efficacy goalpost using potency as a yardstick: Scientific challenges and regulatory framework for advanced therapies*

10:15 – 10:35 – Coffee break

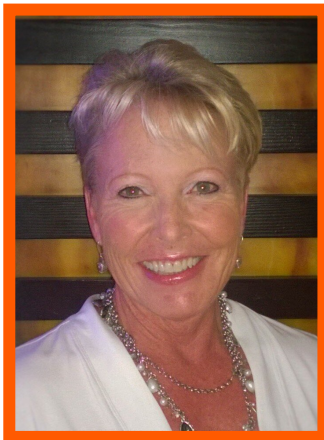
10:35-11:40 – Platform talks – Chair: Kris Morton (Scorpius BioManufacturing, Inc)

10:35-10:55 **Christopher Navara** (UTSA)  
*iPSC derived therapies: Donor tissue to GMP production*

10:55-11:15 **Carlos Cantu** (SwRI)  
*A scalable 3D printed bioreactor for adherent cell-based production of viral vector*

11:15-11:40 **Mike Fiske** (Regenerative Science, Inc)  
*Phase appropriate GMP for biologics product development*

**11:40 –12:40 – Keynote Lecture #2**



11:40-11:45 – Introduction of Dr. Jane Andrews  
– Kris Morton (Scorpius BioManufacturing, Inc)

11:45-12:40 – **Jane Andrews**  
Cell Bridge Strategies

***State of the Advanced Therapies Industries and  
Biomanufacturing Opportunities***

Dr. Jane Andrews is Founder and CEO of Cell Bridge Strategies, an International Life Science and Regenerative Medicine consulting firm. She obtained her BS, MS & PhD from the University of Wisconsin – Madison, followed by a Postdoctoral Fellowship at Penn State University. Jane bridges science to business based on her deep understanding of the technology, markets, & operational aspects that lead to biomedical advancement. She helps companies target key assets, create strategies, execute tactics, build financial & market models, identify potential partners, advisory boards, funding and/or M&A opportunities. Jane has owned businesses, held numerous academic and corporate positions, including Adjunct and Assistant Professorships, Senior Staff Scientist at the Audubon Center for Research of Endangered Species, was a NASA Senior Scientist, International Consultant for Frost & Sullivan and Corporate Executive for BioBridge Global.

12:40 – 2:00 – Lunch (provided) & Panel Discussion

1:00-2:00 **Panel discussion on *Career Opportunities in the Biotechnology Sector***  
– Chair: Jane Andrews (Cell Bridge Strategies)



**Jane Andrews**  
Cell Bridge Strategies

**Kris Morton**  
Scorpius  
BioManufacturing, Inc

**Mike Fiske**  
Regenerative  
Science, Inc

**Autumn Stroud**  
Scorpius  
BioManufacturing, Inc

2:00 – Conference adjourns