

## Program Schedule for 2023 RegenMed SA Conference

### THURSDAY – Basic Stem Cell Biology & Tissue Engineering

8:30 – 10:00 – Platform talks – Chair: John McCarrey (UTSA)

- 8:30-8:50      **Farzaneh Atrian** (UT Health SA)  
*Formation of circular RNAs drive neurotoxicity in tauopathy*
- 8:50-9:15      **Maryanne Herzig** (USA-ISR)  
*Metabolic consequences of cold storage on human mesenchymal stromal cells*
- 9:15-9:40      **Jake Lehle** (UTSA)  
*Reprogramming in a dish – An in vitro model of transgenerational epigenetic inheritance*
- 9:40-10:00      **Wensheng Zhang** (59<sup>th</sup> Med Wing, USAF)  
*Local delivery of mesenchymal stem cells for targeted immunomodulation and tissue preservation in vascularized composite allotransplantation*

10:00 – 10:20 – Coffee break

10:20 – 11:40 – Platform talks – Chair: Jim Bynum (UT Health SA)

- 10:20-10:40      **Dan Lodge** (UT Health SA)  
*Modeling the developmental effects of prenatal opioid exposure using human brain organoids*
- 10:40-11:05      **Gopu Changarathil** (UTSA)  
*Timp3 mediated control of pro-epileptogenic aberrant neurogenesis*
- 11:05-11:20      **Travis Block** (StemBioSys)  
*Astrocyte derived extracellular matrix speeds maturation of iPSC-derived neurons*
- 11:20-11:40      **Feng-Chun Yang** (UT Health SA)  
*The essential role of BRD4 in hematopoietic stem cell functions*

11:40 – 12:10 – Poster teasers & Sponsor presentations

12:10 – 1:00 – Lunch (provided)

1:00 – 2:45 – Platform talks – Chair: Christi Walter (UT Health SA)

- 1:00-1:20      **Uchit Bhaskar** (UTSA)  
*“Age-in-a-dish” model of astrocytes – Can directed differentiation do the trick?*

1:20-1:40 **Nicholas McMahon** (SwRI)  
*Improvement of thermogenic activity in adipose tissue via nanoparticle-based targeted delivery of nucleic acids and molecules*

1:40-2:00 **Lacy Barton** (UTSA)  
*Reaching the target: Primordial germ cells as a model for stem cell migration and colonization*

2:00-2:20 **Naomi Sayre** (UT Health SA)  
*Targeting neural stem cell LRP1 in stroke and aging: friend or foe?*

2:20-2:40 – Coffee break

2:40-3:05 **Alexey Soshnev** (UTSA)  
*Regulation of developmental trajectory by chromatin compaction*

3:05-3:25 **Maria Gonzalez Porras** (UTSA)  
**Improvement of thermogenic activity in adipose tissue via nanoparticle-based targeted delivery of nucleic acids and molecules**

3:25-3:40 **Umang Sharma** (USA-ISR)  
*Effects of extracellular vesicles derived from irradiated and non-irradiated skeletal muscle stem cells on myogenesis and angiogenesis*

3:40-4:00 **Carlos Cantu** (UTSA)  
*QCM-I biosensor for continuous monitoring of viral vector production for cell and gene therapy*

4:00 – 5:00 – Keynote Lecture #1

4:00-4:05 Introduction of Dr. Haifan Lin – Keynote Lecture #1  
- John McCarrey (UTSA)

4:05 – 5:00 **Haifan Lin** (Yale University)  
*The Piwi-piRNA pathway: A new world of gene regulation in the germ line*

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

## **FRIDAY – Clinical Applications & Technology Transfer**

8:30 – 10:45 – Platform talks – Chair: Adam Meledeo (USA-ISR)

- 8:30-9:05      **Barbara Christy** (USA-ISR)  
*Acute injury in a rat whole body X-irradiation model*
- 9:05-9:25      **Mary Pat Moyer** (INCELL)  
*Biomanufacturing, packaging and quality: core actions to make sellable regenmed products*
- 9:25-9:50      **Tiffani Chance** (USA-ISR)  
*Trauma effects on the acute profiling of early shed markers of coagulopathy and endotheliopathy*
- 9:50-10:10     **Samantha Dykes** (BioBridge Global)  
*The first steps in manufacturing: Effective tech Transfer*
- 10:10-10:25    **Christopher Delavan** (USA-ISR)  
*Mesenchymal stromal cells as a potential cell-therapeutic option for endothelial dysfunction as the result of exposure to ionizing radiation*
- 10:25-10:45    **Erik Hegeman** (59<sup>th</sup> Med Wing, USAF)  
*A translational porcine model for polyethylene glycol fusion-based therapies in nerve reconstruction after large-gap peripheral nerve injury*

10:45 – 11:05 – Coffee break

11:05-12:00 – Keynote Lecture #2

- 11:05-11:10    Introduction of Dr. Kristin Baldwin – Keynote Lecture #2  
- Christi Walter (UT Health SA)
- 11:10-12:00    **Kristin Baldwin** (Columbia University)  
*Reprogramming, genome diversity and disease*

12:00 – 1:30 – Lunch (provided) &  
Panel Discussion on Organoids as Models for Regenerative Medicine Research

- 12:30-1:30      **Panel discussion on *the use of organoids in regenerative medicine research***  
**Jenny Hsieh** (UTSA) – Chair  
**Kristin Baldwin** (Columbia University)  
**Pei Wang** (UT Health SA)  
**Zane Lybrand** (Texas Woman’s University)  
**Travis Block** (StemBioSys)

1:30 – 3:00 – Platform talks – Chair: Sy Griffey (Sequence LifeScience)

- 1:30-1:50      **Gongchen Sun** (UTSA)  
*Accessible microfluidic and electrokinetic technologies for multiscale  
bioseparation and imaging-based screening*
- 1:50-2:15      **Luciana Torres** (USA-ISR)  
*Acute radiation exposure increases mortality to traumatic hemorrhage*
- 2:15-2:35      **Carolina Vivas Valencia** (UTSA)  
*Data analytics for healthcare applications*
- 2:35-2:50      **Danny Lee** (Tissue Regenix)  
*Scaffolds for regenerative medicine*

2:50 – Conference adjourns