

RegenMed SA
Second San Antonio Conference on
Stem Cell Research & Regenerative Medicine

University Center Ballroom #1, UTSA Main Campus

Program

Thursday, February 11th

8:30 – **Opening Keynote Lecture** – Introduced by John McCarrey, UTSA
Sean Morrison (Professor and Mary McDermott Cook Chair in Pediatric Genetics, UT Southwestern Medical Center)
“Stem Cell Niches in the Bone Marrow”

Session I – Science of Stem Cells

[Session chair – Christi Walter, UTHSCSA]

9:30 – **Tiziano Barberi** (SNPRC)
“Directed Derivation of Specific Cell Types from Human Pluripotent Stem Cells”

9:50 – **Doug Grow** (UTSA)
“Toward Establishing the Baboon as a Preclinical Model for Pluripotent Stem Cell Therapy for Parkinson's Disease: Production and Characterization of Dopamine Neurons from Baboon Pluripotent Stem Cells”

10:10 – **Shamim Mustafa** (UTHSCSA)
“Effect of Mechanical Ventilation and Postnatal Adaptation on Endogenous Premature Lung Mesenchymal Stromal Cells”

10:30 – *Coffee break*

11:00 – **Xiao-Dong Chen** (Stem BioSys/UTHSCSA)
“Restoring the Regenerative Capacity of Human Bone Marrow-derived Mesenchymal Stem Cells (BM-MSCs) from the Elderly to Establish a High Quality Autologous MSC Bank”

11:20 – **Travis Kotzur** (UTSA)
“Granulocyte Colony-Stimulating Factor (G-CSF) Promotes Spermatogenic Regeneration after High-Dose Alkylating Chemotherapy”

11:40 – **Doug Frantz** (UTSA)
“Discovery of Small Molecules as Tools to Understand and Regulate Stem Cell Differentiation”

12:00 – *Lunch (provided)*

1:00 – **Luis Penalva** (UTHSCSA)
“miRNA Networks in Neurogenesis”

1:20 – **Jon Bohmann** (SwRI)
“In Silico Simulation of Allosteric Inhibitors of Survivin in the Role of Modulating Stemness”

Session II – Tissue Engineering

[Session chair – Jian Ling, SwRI]

1:40 – **Randolph Stone** (USA-ISR)
“Pegylated Fibrin Hydrogels for Delivery of Adipose Stem Cells To Deep Partial Thickness Burn Wounds”

2:00 – **Teja Guda** (UTSA)
“Musculoskeletal Tissue Engineering for Composite Tissue Damage”

2:20 – **John Fletcher** (USA-ISR)
“Single Stage Bilayer Skin Replacement Is Feasible in a Porcine Model of Excisional Wounding”

2:40 – *Coffee break*

3:10 – **Ramesh Kaini** (USA-ISR)
“Extracellular Matrix Remodeling during 3D Retinal Differentiation of Human Induced Pluripotent Stem Cells”

3:30 – **Xing Guo Cheng** (SwRI)
“In Vivo Tendon Regeneration in a Critical Size Tendon Defect Model Using Advanced Biomaterials, a Growth Factor, and Adipose-Derived Stem Cells (ADSCs)”

3:50 – **Heuy-Ching Wang** (USA-ISR)
“Stem Cells as Tools in Tissue Engineering and Injury Modeling for Combat-Related Ocular Injuries”

- 4:10 – **Nikita Ruparel** (UTHSCSA)
“Advancements in Regenerative Endodontics”
- 4:30 – **Jian Ling** (SwRI)
“A Biomimetic Osteoconductive and Osteoinductive Tissue Engineering Bone Scaffold”

4:50 – *Adjourn to Poster Session & Reception*

5:00 – 7:00 – **Poster Session & Networking Reception – UC Ballroom #2**

Friday, February 12th

Session III – Clinical Progress & Applications

[Session chair – Michael Davis, USA-ISR]

- 8:30 – **Senlin Li** (UTHSCSA)
“Novel Hematopoietic Stem Cell Transplantation-based Gene Editing as Therapeutics”
- 8:50 – **Shan Natesan** (USA-ISR)
“A Human Plasma-Extracellular Matrix Composite for Improved Skin Regeneration”
- 9:10 – **Marcel Daadi** (SNPRC)
“MRI Guided Delivery of Neural Stem Cells into the Basal Ganglia of Baboons”
- 9:30 – *Coffee break*
- 10:00 – **George Perry** (UTSA)
“Alzheimer ‘Disease-In-A-Dish’ and Development of Novel Therapeutics”
- 10:20 – **Daniel Lodge** (UTHSCSA)
“Stem Cell Derived Interneuron Transplants as a Novel Therapy for Psychiatric Disease”
- 10:40 – **Christine Kowalczewski** (USA-ISR)
“Development of a Swine Model To Investigate the Conversion of Burns from Partial-Thickness To Full Thickness in Depth”

11:00 – **Peter Hornsby** (UTHSCSA)

“Intranasal Delivery of Stem Cells to the CNS”

11:20 – **Ben Antebi** (USA-ISR)

“Systemic Administration of Stem Cells: Bedside Cell Retrieval, Characterization and Viability”

11:40 – **Donna Lehman** (UTHSCSA)

“Understanding Obesity Susceptibility Using Human iPS-Derived Hypothalamic Neurons”

12:00 – *Lunch (provided)*

Session IV – Technology Transfer & Commercialization

[Session chair – Sy Griffey, StemBioSys]

1:00 – **Tamsen Barrett** (Norton Rose Fullbright)

“Keys to IP”

1:20 – **Danny Lee** (Aperion)

“Concept to Commercialization – Aperion’s Tenacity”

1:40 – **Cory Hallam** (UTSA)

“University Partnerships in a New Age of Biomedical Technology Commercialization”

2:00 – **Closing Keynote Lecture** – Introduced by Michael Davis, USA-ISR

Rocky Tuan (McGowan Institute for Regenerative Medicine)

“Adult Stem Cells and Biomimetic Materials for Skeletal Tissue Regeneration: Repair, Restore, and Re-create”

3:00 – *Conference Adjourns*