SESSION 2: STEM CELLS AND REGENERATION

8:30 AM OPENING ANNOUNCEMENTS

8:35 AM TO 9:15 AM
Maysa Mokalled & Vishnu Saraswathy (Postdoc), Washington University School of Medicine in St. Louis
Title: Comparative approaches reveal regenerative mechanisms in the spinal cord

9:20 AM TO 9:40 AM
Vidyandra Sasiidharaan, Stowers Institute for Medical Research
Title: Extracellular-vesicle mediated cell-cell communication is required for planarian tissue maintenance

9:45 AM TO 10:05 AM
Ram Kumar, University of Kansas Medical Center
Title: METTL3 Orchestrates the Self-Renewal and Differentiation Potential of human Trophoblast Stem/Progenitor Cells

10:05 AM TO 10:30 AM COFFEE BREAK/BREAKFAST SNACKS

10:30 AM TO 11:10 AM
Andy Groves & Ishwar Hosamani (Graduate student), Baylor College of Medicine
Title: Can we restore hearing by reprogramming the cochlea?

11:15 AM TO 11:35 AM
Fang Tao, Children’s Mercy Research Institute
Title: Stem Like T Cells in Anti-cancer Immunosurveillance Against Therapy-resistant Pediatric Cancer
11:40 AM TO 12:00 PM  | **Kunal Jindal**, Washington University School of Medicine  
Title: *Single-cell lineage capture across genomic modalities with CellTag-multi reveals fate-specific gene regulatory changes*

12:00 PM TO 1:30 PM  | LUNCH: STOWERS LIBRARY

**SESSION 3: STEM CELL REGULATION AND DISEASE**

1:40 PM TO 2:20 PM  | **Sandra Pinho**, The University of Illinois at Chicago  
Title: *Regulation of leukemic stem cell proliferation by the bone marrow microenvironment.*

2:25 PM TO 2:45 PM  | **Ruochen Dong**, Stowers Institute for Medical Research  
Title: *Spatial Transcriptomics Reveals Distinct Hematopoietic Stem Cell Niches in Mouse Fetal Liver*

2:50 PM TO 3:10 PM  | **Levi Arnold**, University of Kansas Medical Center  
Title: *DCLK1-Mediated Regulation of Invadopodia Dynamics and Matrix Metalloproteinase Trafficking Drives Invasive Progression in Head and Neck Squamous Cell Carcinoma*

3:10 PM TO 3:30 PM  | BREAK: SNACKS & REFRESHMENTS

3:30 PM TO 4:10 PM  | **Simón Méndez-Ferrer & Livia Lisi-Vega** (PhD Student), University of Cambridge  
Title: *Disentangling the microenvironment regulation for improved treatment of myeloid malignancies*

4:15 PM TO 4:35 PM  | **John Perry**, Children’s Mercy Research Institute  
Title: *Induced pluripotent stem cell models for leukemia development and discovery of targeted therapies*

4:35 PM TO 5:35 PM  | POSTER SESSION 1

5:40 PM TO 6:35 PM  | **KEYNOTE: David Scadden**, Harvard University  
Title: *Regenerating the adult thymus*

6:45 PM  | DINNER: STOWERS LIBRARY

**FRIDAY, OCTOBER 13**

**SESSION 4: STEM CELLS AND THEIR ENVIRONMENT**

8:30 AM  | OPENING ANNOUNCEMENTS

8:35 AM TO 9:15 AM  | **Sara A. Wickström & Clémentine Villeneuve** (Postdoc), Max Planck Institute for Molecular Biomedicine; University of Helsinki.  
Title: *Coordination of cell states and morphogenesis by mechanical force*

9:20 AM TO 9:40 AM  | **Colton Lysaker**, University of Kansas Medical Center  
Title: *Unraveling the Role of APOE Genetic Variation in Metabolic Function: Insights from iPSC-Derived Models*

9:45 AM TO 10:05 AM  | **Heather Le Bleu**, University of Oregon  
Title: *Voltage-gated calcium channels restrain outgrowth to restore zebrafish regenerated fin size*

10:05 AM TO 10:30 AM  | COFFEE BREAK/BREAKFAST SNACKS

10:30 AM TO 11:10 AM  | **Richard Locksley & Victor Cortez** (Postdoc), University of California San Francisco  
Title: *Lessons from Helminths*
11:15 AM TO 11:35 AM | **Shinghua Ding**, University of Missouri
Title: Targeting bone marrow hematopoietic stem/progenitor cells to systematically increase bioenergetics for neurodegenerative disease therapy

11:40 AM TO 12:00 PM | **Daniela Muench**, Stowers Institute for Medical Research
Title: Immune and Sensory Organ Regeneration Programs Differ in Response to Distinct Types of Cell Death

12:00 PM TO 1:30 PM | **LUNCH**: STOWERS LIBRARY

**SESSION 5: STEM CELLS, AGING, AND THE BRAIN**

1:40 PM TO 2:20 PM | **Ana Martin-Villalba**, German Cancer Research Center
Title: The molecular secrets of stemness in the young, injured and aging brain

2:25 PM TO 2:45 PM | **Seppe De Winter**, KU Leuven
Title: Deciphering the gene regulatory mechanisms underlying human neural tube development using organoids, single-cell multiomics and machine learning.

2:50 PM TO 3:10 PM | **Carlo Donato Caiaffa**, Dell Pediatrics Research Institute, The University of Texas at Austin
Title: The Effects of Dolutegravir on the Development of Brain Organoids.

2:30 PM TO 3:30 PM | **POSTER SESSION 2**

3:35 PM TO 4:30 PM | **KEYNOTE**: Jürgen Knoblich & Ramsey Najm (Postdoc), Institute of Molecular Biotechnology
Title: Modelling neurodevelopmental disorders in stem cell derived brain organoid culture

4:45 PM TO 6:30 PM | **CONFERENCE CLOSING RECEPTION**: STOWERS LIBRARY
Campus Map