

**WELCOME AND OPENING**

8:25-9:00am	Current Concepts and Changing Trends Anthony Atala MD	5206/ 5207
-------------	--	---------------

**SESSION 1: PLURIPOTENT STEM CELLS & PROGENITORS**

9:00-9:20am	Modeling Intellectual Disability Syndromes with Human Induced Pluripotent Stem Cells William Lowry PhD	5206/ 5207
9:20-9:40am	Leveraging Cortical Organoids to Understand Human Brain Development and Cancer Aparna Bhaduri PhD	5206/ 5207
9:40-10:00am	The Use of Stem and Progenitor Cells in Prenatal Therapies Graca Almeida-Porada MD, PhD	5206/ 5207
10:00-10:15am	Discussion Panel Moderator: Victoria Weis PhD	5206/ 5207

**SESSION 2: BIOMATERIALS**

10:30-10:50am	Regenerative Biomaterials: Enabling Pro-Regenerative Devices Guillermo Ameer PhD	5206/ 5207
10:50-11:10am	Injectable and 3D-printable Hydrogels for Tissue Engineering Tony Mikos PhD	5206/ 5207
11:10-11:30am	ECM-Focused Jane Grande-Allen PhD	5206/ 5207
11:30-11:50am	Synthetic & Natural Biodegradable Biomaterials for Tissue Engineering Applications Young Min Ju PhD	5206/ 5207

**DAY 1****JUNE 11****SESSION 2: BIOMATERIALS**

11:50am-	Discussion Panel	5206/
12:05pm	Moderator: TBD	5207
————— Lunch (5203/05) —————		

**SESSION 3: ENABLING TECHNOLOGIES**

1:00-1:20pm	3D Printing Technologies for Functional Tissue and Organ Replacement <b>Sang Jin Lee PhD</b>	5206/ 5207
1:20-1:40pm	Understanding & Re-Writing Cellular & Molecular Programs Within Skeletal Muscle <b>Carlos Aguilar PhD</b>	5206/ 5207
1:40-2:00pm	Imaging and Regenerative Medicine <b>Frank Marini PhD</b>	5206/ 5207
2:00-2:20pm	Gene Therapy and Gene Editing: The Promise of a Lifelong Cure <b>Christopher Porada PhD</b>	5206/ 5207
2:20-2:40pm	Human Lung Organ Tissue Equivalents for Disease Modeling & Drug Discovery <b>Sean Murphy PhD</b>	5206/ 5207
2:40-2:55pm	Discussion Panel Moderator: Sean Murphy, PhD	5206/ 5207
————— Break —————		

**SESSION 4: CELL THERAPIES**

3:15-3:35pm	Contemplating Novel Mechanisms of Action for Clinical Translation of Allogenic Cellular Therapeutics <b>Robert (Willie) Mays PhD</b>	5206/ 5207
-------------	---	---------------

**DAY 1****JUNE 11****SESSION 4: CELL THERAPIES**

3:35-3:55pm	Human iPSCs and Cardiac Therapy <b>Chunhui Xu PhD</b>	5206/ 5207
3:55-4:15pm	Placental Stem Cell Based Therapy for Necrotizing Enterocolitis in the Premature Infant <b>Victoria Weis PhD</b>	5206/ 5207
4:15-4:35pm	Regenerative Surgery and Stem Cell Therapies <b>Vijay Gorantla MD, PhD</b>	5206/ 5207
4:35-4:55pm	mRNA Technology: Disruptor in RM, Cell-based Approaches and Immune Modulation <b>Norman Drzeniek MD</b>	5206/ 5207
4:55-5:15pm	Discussion Panel Moderator: <b>Joshua Maxwell, PhD</b>	5206/ 5207

5:15-6:30pm

Opening Reception &amp; Networking

**DAY 2****JUNE 12****SESSION 5: TISSUE ENGINEERED MEDICAL PRODUCTS**

8:15-8:30am	Welcome & Day 2 Overview <b>Joan Schanck</b>	5206/ 5207
8:30-8:50am	Considerations for Developing Tissue Engineered Medical Products <b>James Yoo MD, PhD</b>	5206/ 5207
8:50-9:10am	What's Lost in Translation? <b>Jennifer Elisseff, PhD</b>	5206/ 5207

**DAY 2****JUNE 12****SESSION 5: TISSUE ENGINEERED MEDICAL PRODUCTS**

9:10-9:30am	Tissue Engineering Beyond Regenerative Medicine <b>Gabor Forgacs PhD</b>	5206/ 5207
9:30-9:45am	Discussion Panel <b>Moderator: James Yoo MD, PhD</b>	5206/ 5207

---

**Break**

---

**SESSION 6: REGULATORY, PROCESS DEVELOPMENT & MANUFACTURING**

10:00-10:30am	FDA Efforts to Advance Cell & Gene Therapy Development <b>Peter Marks PhD</b>	5206/ 5207
10:30-10:45am	Innovation in Product Testing and Manufacturing for RM Product Development <b>Steve Bauer PhD</b>	5206/ 5207
10:45-11:00am	Extracellular Vesicles and Gene Therapies <b>Kenneth Witwer PhD</b>	5206/ 5207
11:00-11:15am	Federal Efforts to Support In-Depth Cell Characterization <b>Martha Lundberg PhD</b>	5206/ 5207
11:15-11:30am	Space, FDA and Existing Regulations <b>Jana Stoudemire</b>	5206/ 5207
11:30-11:45am	Discussion Panel <b>Steve Bauer PhD</b>	5206/ 5207

---

**Lunch**

---

**Concurrent Young Scientist Perspectives Session**

11:45am-1:00pm	Career Perspectives Session I: RM Research Careers led by WFIRM Graduate Student Organization	5203/ 5205
----------------	---	---------------

**SESSION 7: RM AND BIOMANUFACTURING IN SPACE: A NEW FRONTIER**

1:00-1:55pm	This session introduces participants how the microgravity conditions of space offer profound opportunities for the RM field and advanced biomanufacturing. <b>Anthony Atala MD</b> <b>Anna Brady-Estevez PhD</b> <b>Kevin Engelbert PhD</b> <b>Davide Marrotta PhD</b> <b>Jana Stoudemire</b>	5206/ 5207
1:55-2:15pm	Discussion Panel <b>Moderator: Jana Stoudemire</b>	5206/ 5207
Break		

**SESSION 8: HEALTH DISPARITIES, GENDER EQUITY & RM**

2:30-2:45pm	Reducing Health Disparities and Advancing Equity in Regenerative Medicine <b>Monica Webb-Hooper PhD</b>	5206/ 5207
2:45-3:00pm	Reviewing Health Disparities and Health Equity <b>Allison Caban-Holt PhD</b>	5206/ 5207
3:00-3:15pm	CV Disease and Diabetes: Metabolic Age and Stressors <b>Alisa Morris-Clyne PhD</b>	5206/ 5207
3:15-3:30pm	Factors Impacting Access to Novel Cell-based Therapies: A Case Study of Platelet-rich Plasma to Treat Knee Osteoarthritis <b>Zubin Master PhD</b>	5206/ 5207

**DAY 2****JUNE 12****SESSION 8: HEALTH DISPARITIES, GENDER EQUITY & RM**

3:30-3:45pm	Discussion Panel	5206/
	Moderator: Tracy Criswell PhD	5207
Break		

**SESSION 9: SPECIAL TOPIC - REGENERATIVE REHABILITATION WITH AR3T**

4:00-4:10pm	Regenerative Rehabilitation: an Introduction	5206/ 5207
	Kaitlin Geran	
4:10-4:30pm	Combined Structured Treadmill Walking and Neural Stem Cell Therapy Improves Traumatic Brain Injury Recovery in a Pediatric Porcine Model	5206/ 5207
	Franklin West PhD	
4:30-4:50pm	Scar-Free Ligament Healing: Lessons from the Highly Regenerative Zebrafish	5206/ 5207
	Joanne Smeeton PhD	
4:50-5:10pm	Discussion Panel	5206/
	Moderator: Kaitlin Geran	5207

5:15-6:30pm

Evening Reception and Networking

**DAY 3****JUNE 13****SESSION 10: CLINICAL TRIALS AND BIOETHICS**

8:15-8:30am	Welcome & Day 3 Overview	5206/
	Joan Schanck	5207
8:30-8:50am	Transitioning from Bench to Clinic: Planning for Clinical Research Success	5206/ 5207
	Will Combs MBA	

**DAY 3****JUNE 13****SESSION 10: CLINICAL TRIALS AND BIOETHICS**

8:50-9:10am	Cardio-Focused Therapy <b>Doris Taylor PhD</b>	5206/ 5207
9:10-9:30am	Who's getting an unproven stem cell therapy outside a clinical trial? <b>Zubin Master PhD</b>	5206/ 5207
9:30-9:50am	How to Translate Lessons Learned at the Bench into Successful Cell Therapy Based Clinical Trials <b>Robert (Willie) Mays PhD</b>	5206/ 5207 5206/ 5207
9:50-10:15am	Discussion Panel <b>Moderator: Tracy Criswell PhD</b>	5206/ 5207

---

**Break**

---

**SESSION 11: COMMERCIALIZATION**

10:30-10:50am	Early Considerations in the Development and Commercialization of Advanced Tissue Repair <b>Michael Hiles PhD</b>	5206/ 5207
10:50-11:10am	Translation of Biodegradable Nerve Guides into Humans: Challenges and Opportunities <b>Kacey Marra PhD</b>	5206/ 5207
11:10-11:30am	Commercialization from Cells to Organs: What I Now See 25 Years Later <b>Taylor Doris PhD</b>	5206/ 5207
11:30-11:50am	Discussion Panel <b>Moderator: Graca Almeida-Porada MD, PhD</b>	5206/ 5207

---

**Lunch**

---



---

**Optional Lab Tours**

---

**DAY 3****JUNE 13****SESSION 12: LESSONS LEARNED IN BUILDING INNOVATION  
ECOSYSTEMS IN REGENERATIVE MEDICINE**

1:15-2:15pm	This session introduce participants to lessons learned in building innovation ecosystems from different regions including Boston, North Carolina and San Diego. <b>Joshua Hunsberger, PhD (ReMDO) Jana Stoudemire (Axiom Space) Mr. Joe Panetta (Biocom) Ms. Nancy Johnson (North Carolina Biotechnology Center) Mr. Travis McCready (Americas Markets) Mr. Jason Kaplan (Innovation Quarter)</b>	5206/ 5207
2:15-2:30pm	Discussion Panel <b>Moderator: Joshua Hunsberger</b>	5206/ 5207
Break		

**SESSION 13: RM, EDUCATIONAL AND WORKFORCE DEVELOPMENT**

2:40-2:50pm	Connecting the Dots: An Educational Ecosystem for Regenerative Medicine <b>Russ Read</b>	5206/ 5207
2:50-3:00pm	WFIRM's Training Ecosystem: Past, Present, Future <b>Joan Schanck MPA</b>	5206/ 5207
3:00-3:10pm	Graduate Education in Tissue Engineering and Regenerative Medicine <b>Tracy Criswell PhD</b>	5206/ 5207



**DAY 3****JUNE 13****SESSION 13: RM, EDUCATIONAL AND WORKFORCE DEVELOPMENT**

3:10-3:40pm	Required Elements for Training and Education of the Regenerative Medicine Skilled Technical Worker and Non-Technical Work <b>Russ Read</b>	5206/ 5207
3:40-3:50pm	Cultural Intelligence in the Workforce <b>Del Ruff PhD</b>	5206/ 5207
3:50-4:00pm	The Federal Role in Advancing and Supporting RM Biomanufacturing <b>Florence Rabanal PhD</b>	5206/ 5207
4:00-4:10pm	AAR Training Physicians in Regenology <b>Angeli Akey MD, FACP</b>	5206/ 5207
4:10-4:20pm	Discussion Panel <b>Moderator: Russ Read</b>	5206/ 5207

---

**Southern BBQ Event**

**Bailey Park**