

DAY 1

JUNE 10

7:15am-4:00pm Registration open, continental breakfast provided

WELCOME AND OPENING

8:15-8:25am Welcome & Introduction
Joan Schanck MPA

8:25-9:10am Keynote Address
Anthony Atala MD

SESSION 1: PLURIPOTENT STEM CELLS & PROGENITORS

9:10-9:30am Regenerative Medicine: Then and Now
Mahendra Rao PhD

9:30-9:50am Using Stem Cell-Derived 3D Engineered
Cardiac and Skeletal Muscle Tissues for
Disease Modeling and Drug Discovery
David Mack PhD

9:50-10:10am The Use of Stem and Progenitor Cells in
Prenatal Therapies
Graca Almeida-Porada MD, PhD

10:10-10:30am Discussion Panel
Moderator: Joshua Maxwell PhD

Break

OPEN EXHIBIT HALL AND NETWORKING

SESSION 2: BIOMATERIALS

10:45-11:05am Scaffolds in Tissue Engineering and
Regenerative Medicine
Paul Dalton PhD

11:05-11:25am Soft Matter for Tissue Engineering
Yadong Wang PhD

11:25-11:45am Immunologic Considerations in
Biomaterial Design and Application
Kaitlyn Sadtler PhD

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SESSION 2: BIOMATERIALS

- 11:45am-12:05pm

Precision Biomaterials: Controlling Delivery for Tissue Regeneration
Grace Lim PhD
- 12:05-12:25pm

Discussion Panel
Moderator: TBD

Lunch (Room 155)

OPEN EXHIBIT HALL AND NETWORKING

Concurrent Young Scientist Perspectives Session

- 12:30-1:30pm

Career Perspectives Session: RM
Research Careers led by WFIRM
Graduate Student Organization

Auditorium

SESSION 3: ENABLING TECHNOLOGIES

- 1:30-1:50pm

Scaling Cell Production and 3D Bioprinting Towards Whole Organ Manufacturing
Mark Skylar-Scott PhD
- 1:50-2:10pm

Imaging and Regenerative Medicine
Frank Marini PhD
- 2:10-2:30pm

Gene Therapy and Gene Editing: the Promise of a Lifelong Cure
Christopher Porada PhD
- 2:30-2:50pm

Biomaterials Systems for Neural Regenerative Medicine
Sarah Stabehfeldt PhD
- 2:50-3:10pm

Human Lung Organ Tissue Equivalents for Disease Modeling and Drug Discovery
Sean Murphy PhD

DAY 1

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3:10-3:25pm

Discussion Panel
Moderator: Sean Murphy PhD

Break

SESSION 4: CELL THERAPIES

3:40-4:00pm

Cell Therapy: A Stroke of Luck
Cesar Borlongan PhD

4:00-4:20pm

Cell Therapy For Cardiac Repair
Josh Maxwell PhD

4:20-4:40pm

Programmable CRISPR-corrected
Pluripotent Cell Derived Tissue
Replacement Therapies
Anthony Oro PhD

4:40-5:00pm

Placental Stem Cell Based Therapy
for Necrotizing Enterocolitis in the
Premature Infant
Victoria Weis PhD

5:00-5:15pm

Discussion Panel
Moderator: Victoria Weis PhD

5:15-6:15pm

OPENING RECEPTION & NETWORKING, EXHIBIT HALL OPEN

DAY 2

7:15am-4:00pm

Registration open, continental breakfast provided

SESSION 5: TISSUE ENGINEERED MEDICAL PRODUCTS

8:15-8:30am

Welcome & Day 2 Overview
Joan Schanck

8:30-8:50am

Considerations for Developing Tissue
Engineered Medical Products
James Yoo MD, PhD

DAY 2

JUNE 11

SESSION 5: TISSUE ENGINEERED MEDICAL PRODUCTS

- 8:50-9:10am How We Built From Scratch Our
Commercial Organization to Launch
Humacyte's First Product
BJ Scheessele PhD
- 9:10-9:30am Animal Models and Strategies for
Craniomacillofacial Defect Repair
Pam Yelick PhD
- 9:30-9:50am Early Decisions Have Big Impact on the
Development Journey for TEMPs
Michael Hiles PhD
- 9:50-10:10am Panel Discussion
Moderator: James Yoo MD, PhD

Break

OPEN EXHIBIT HALL AND NETWORKING

SESSION 6: REGULATORY, PROCESS DEVELOPMENT & MANUFACTURING

- 10:30-10:45am Perspectives on FDA Activities in
Oversight of Regenerative Medicine
Steve Bauer PhD
- 10:45-11:00am Innovation in Product Testings and
Manufacturing for RM Product
Development
Stephen Sawyer PhD
- 11:00-11:20am Endpoints for Genomic Therapy Trials in
Hemoglobin Disorders
Mark Walters PhD
- 11:20-11:40am NIH Clinical Center Perspectives on
Regenerative Medicine Manufacturing
David Stroncek PhD
- 11:40am-12:00pm Myth or Machine? Using AI in Cell
Therapy Process Development
Alex Sargent PhD

DAY 2

JUNE 11

12:00-12:20pm Space, FDA, and Existing Regulations
Steve Myers PhD

12:20-12:30pm Panel Discussion
Moderator: Stephen Sawyer PhD

————— Lunch (Room 155) —————

OPEN EXHIBIT HALL AND NETWORKING

————— Concurrent Young Scientist Perspectives Session —————

12:30-1:45pm Career Perspectives Session: RM Auditorium
Research Careers led by WFIRM
Graduate Student Organization

SESSION 7: CLINICAL TRIALS AND BIOETHICS

1:45-2:05pm Regenerative Medicine-Bending The Time
and Cost Curve of Clinical Trials
Jennifer Byrne

2:05-2:25pm Who's Getting an Unproven Stem Cell
Therapy Outside a Clinical Trial?
Zubin Master PhD

2:25-2:45pm Challenges to Initiating Cell Therapy
Clinical Trials in Developing Countries
Mahendra Rao PhD

2:45-3:10pm Oxygenated Perfusates for Cell, Tissue,
and Organ Preservation - Design, Scale Up,
Manufacturing and Translational Consideration
Jelena Janjic PhD and Vijay Gorantla MD, PhD

3:10-3:25pm Panel Discussion
Moderator: TBD

————— Optional Lab Tours (signup at registration) —————

DAY 3

JUNE 12

7:15am-4:00pm Registration open, continental breakfast provided

PROGRAM AT A GLANCE

SESSION 8: COMMERCIALIZATION

8:20-8:30am	Welcome & Day 3 Overview Joan Schanck
8:30-8:50am	Considerations in the Commercialization of Advanced Tissue Products Michael Hiles PhD
8:50-9:10am	Hard Lessons from Commercializing Neural Microphysiological Systems Michael Moore PhD
9:10-9:30am	Pro-Regenerative Medical Devices for Improved Outcomes: From Bench to Patients Guillermo Ameer PhD
9:30-9:50am	TBD (Cartilix, Aegeria) Jennifer Ellisseef PhD
9:50-10:10am	Discussion Panel Moderator: TBD
Break	

SESSION 9: DISRUPTIVE TECHNOLOGIES FUELING RM ECOSYSTEMS

10:30-10:45am	Lessons Learned in Building Innovation Ecosystems in Regenerative Medicine Joshua Hunsberger PhD Jana Stoudemire
10:45-11:25am	Virtual Reality: From Connecting Innovation Districts to Workforce Development to Telemedicine Josh Tan PhD Davide Marotta PhD Gail Nolan Russ Read Mike Wesowski Jana Stoudemire Joshua Hunsberger PhD
Break	

DAY 3

JUNE 12

11:40am-12:20pm

AI: From Training Programs to Building Digital Twins to Generating IP to Building Next Generation Products

Russ Read Carrie DiMarzio

Jim Schmidt PhD

Lunch

SESSION 10: THE EMERGING COMMERCIAL SPACE ECONOMY & RM

1:30-2:15pm

Space: The Emerging Commercial Space Economy & Regenerative Medicine

Pinar Mesci PhD Mari Anne Snow

Kobi Koffler PhD Nicole Wagner PhD

Maedeh Mozneb PhD David Lotus PhD

Break

SESSION 11: RM EDUCATIONAL AND WORKFORCE DEVELOPMENT

2:30-2:40pm

WFIRM's Training Ecosystem: Past, Present, Future

Joan Schanck

2:40-2:50pm

AAR Training Physicians in Regenology

Angeli Akey MD

2:50-3:00pm

Healthcare Workers and Apprenticeships in RM

Paul Papali PhD

3:00-3:10pm

Piedmont Triad Regenerative Medicine Engine Workforce Development

Russ Read

3:10-3:20pm

Graduate Education in RM

Tracy Criswell PhD

3:20-3:35pm

Discussion Panel

Moderator: TBD

3:35-3:45pm

Closing Remarks

Joan Schanck