

5th Annual Regenerative Medicine Essentials: *From the Fundamentals to the Future*

Course Agenda

Day 1: Monday, June 4th

11:45am – 1:15pm	Arrival and Registration		5th Floor
1:15pm – 1:30pm	Welcome and Opening Remarks	Joan Schanck, MPA, WFIRM	5107
Session 1: Pluripotent Stem Cells and their Progenitors			
1:30pm – 2:15pm	<i>Introduction and Background: Current Concepts and Changing Trends</i>	Anthony Atala, MD, WFIRM	5107
2:15pm – 3:00pm	<i>Stem Cells, Basic Biology, Therapeutics, and Vehicles for Gene Delivery</i>	Graça Almeida-Porada, MD, PhD, WFIRM (Chair)	5107
3:00pm – 3:15pm	Coffee Break		5th Floor
3:15pm – 4:00pm	<i>Stem Cell-Derived Retinal Pigmented Epithelium: Translation of a Cellular Therapy for Age-Related Macular Degeneration</i>	Dennis Clegg, PhD, UC Santa Barbara	5107
4:00pm – 4:30pm	Panel and Attendees Discussion & Brief Closing Remarks		5107
4:30pm – 6:00pm	Opening Reception (Heavy Hors D'oeuvres and Beer/Wine)		Outdoor patio, 1st floor of Bowman Gray

Day 2: Tuesday, June 5th

7:45am – 8:30am	Networking and Continental Breakfast		5th Floor
Session 2: Biomaterials			
8:30am – 9:10am	<i>Essential Biomaterials Science</i>	David Williams, PhD, WFIRM (Chair)	5107
9:10am – 9:50am	<i>Engineering Naturally Derived Hydrogels for Applications in Regenerative Medicine</i>	Aleks Skardal, PhD, WFIRM	5107
9:50am – 10:10am	Coffee Break and Exhibits		5th Floor
10:10am – 10:50am	<i>Engineering and Applications of Biomaterials in 3D Printing</i>	John Fisher, PhD, U of Maryland	5107
10:50am – 11:30am	<i>Synthetic Biomaterials for Engineering Bone and Cartilage Implants</i>	Anthony Melchiorri, PhD, Rice University	5107
11:30am – 12:00pm	Panel and Attendees Discussion		5107
12:00pm – 1:15pm	Lunch Break and Exhibits		5206 (Seating in 5203 & 5205)
12:00pm – 1:15pm	Student-Mentor Luncheon Session I <i>Career Perspectives in Academia: How to Prepare Yourself for an Academic Career</i>	Peter Prim, PhD, Postdoctoral Fellow, WFIRM and Renata Magalhaes, MD, Pre-doctoral Fellow, WFIRM	5207

Session 3: Enabling Technologies

1:15pm – 2:00pm	<i>Overview of Enabling Technologies in Regenerative Medicine (with Gene Therapy Applications)</i>	Christopher Porada, PhD, WFIRM (Chair)	5107
2:00pm – 2:45pm	<i>Tracking Stem Cells Anywhere in the Body - A Look at Regenerative Imaging</i>	Frank Marini, PhD, WFIRM	5107
2:45pm – 3:00pm	Coffee Break and Exhibits		5th Floor
3:00pm – 3:45pm	<i>Bioprinting: Enabling Technology for Tissue Engineering & Regenerative Medicine</i>	John Jackson, PhD, WFIRM	5107
3:45pm – 4:30pm	<i>Genome Editing for Research and Therapeutic Applications</i>	Kiran Musunuru, MD, PhD, MPH, FAHA, U of Pennsylvania	5107
4:30pm – 4:45pm	Presenting Sponsor: <i>Flexcell International Corporation</i> <i>Flexcell's Dynamic 2 and 3D Culture Systems for Stem Cell Tissue Engineering</i>	Albert J. Banes, PhD, Flexcell	5107
4:45pm – 5:00pm	Panel and Attendees Discussion		5107
5:00pm – 6:00pm	Refreshments and Networking		Bailey Park, across from Bowman Gray

Day 3: Wednesday, June 6th

8:00am – 8:45am	Networking and Continental Breakfast		5th Floor
Session 4: Cell Therapies			
8:45am – 9:30am	<i>Applications of Perinatal Stem Cells and Tissues</i>	Sean Murphy, PhD, WFIRM (Chair)	5107
9:30am – 10:15am	<i>Stem Cell Therapies for Human Heart Disease</i>	Joshua Hare, MD, FACC, FAHA, U of Miami	5107
10:15am – 10:35am	Coffee Break and Exhibits		5th Floor
10:35am – 11:20am	<i>Game Changers: Using Cord Blood to Help the Brain</i>	Joanne Kurtzberg, MD, Duke Medical Center	5107

11:20am – 11:50am	Panel and Attendees Discussion		5107
11:50am – 1:00pm	Lunch Break and Exhibits		5206 (Seating in 5203 & 5205)
Session 5: Tissue Engineered Products & Technologies (TEMPs)			
1:00pm – 1:40pm	<i>Considerations for Developing Tissue Engineered & Regenerative Medicine Products</i>	James Yoo, MD, PhD, WFIRM (Chair)	5107
1:40pm – 2:20pm	<i>Translational Effort: Bringing a Tissue Engineered Combination Product to Patients</i>	Saverio La Francesca, MD, Orgagen	5107
2:20pm – 2:40pm	Coffee Break and Exhibits		5th Floor
2:40pm – 3:20pm	<i>Regenerative Skin Substitutes: Discovery to Phase III Trial in Burns</i>	Allen Comer, PhD, Stratatech	5107
3:20pm – 3:50pm	Panel and Attendees Discussion		5107
3:50pm – 4:30pm	Coffee Break and Exhibits		5th Floor
4:00pm – 5:15pm	WFIRM "Into the Lab" Tours (Shuttle Service or walk; Van shuttle to WFIRM from Medical Education Center from 3:15 pm to 5:45 pm)	Tours begin at 4:15; 4:35 and 4:55pm	WFIRM
4:30pm – 6:00pm	Social Networking with Refreshments (Light Hors D'oeuvres and Beer/Wine)		WFIRM outdoor patio
Day 4: Thursday, June 7th			
7:45am – 8:30am	Networking and Continental Breakfast		5th Floor
Session 6: Regulatory, Process Development & Manufacturing			
8:30am – 8:45am	<i>Presenting Sponsor: Nordmark Biochemicals</i> <i>Collagenase: The Key Enzyme in the Process of Cell Isolation</i>	Johanna Moench, PhD, Nordmark Biochemicals	5107
8:45am – 9:20am	<i>Intro to Translation in Academia: Challenges and Possible solutions</i>	Julie Allickson, PhD, WFIRM (Chair)	5107
9:20am – 9:55am	<i>The Regulatory Framework for Regenerative Medicine in the United States</i>	Peter Marks, MD, PhD, CBER/FDA	5107
9:55am – 10:15am	Coffee Break and Exhibits		5th Floor
10:15am – 10:50am	<i>Catalyzing Partnerships and Innovation for Regenerative Medicine</i>	Martha Lundberg, PhD, NHLBI, NIH	5107
10:50am – 11:20am	<i>Funding the Future of Research: Back to the Future</i>	Robert Klein, JD, Americans for Cures	5107
11:20am – 11:45am	Panel and Attendees Discussion		5107
11:45am – 12:45pm	Lunch Break and Exhibits		5206 (Seating in 5203 & 5205)
11:45am – 12:45pm	Student-Mentor Luncheon Session II <i>Careers in Industry Panel</i>	PhD Candidates: Kevin Enck and Andrea Mazzocchi, WFIRM	5207
Session 7: Clinical Trials & Bioethics			
12:45pm – 1:25pm	<i>IND/IDE: The Good, the Bad and the UGLY!</i>	Richard Clark, PhD, Stony Brook	5107
1:25pm – 2:05pm	<i>Clinical Trials Case Studies: Commercial and Ethical Considerations for Execution and Reporting of Clinical Trials</i>	Todd McAllister, PhD, Amnion Foundation	5107
2:05pm – 2:20pm	Focus Break with Synapse and Exhibits		5th Floor
2:20pm – 2:50pm	<i>Translational Regenerative Medicine Research: Ethics Overview</i>	Nancy King, JD, Wake Forest University	5107
2:50pm – 3:10pm	Panel and Attendees Discussion		5107
3:10pm – 3:30pm	Coffee Break and Exhibits		5th Floor
Session 8: Regenerative Rehabilitation			
3:30pm – 4:05pm	<i>Principles of Regenerative Rehabilitation</i>	Nick Willett, PhD, Emory	5107
4:05pm – 4:40pm	<i>Interactive Effects of Rehabilitation and Cell Therapy to Treat Brain Damage</i>	Michel Modo, PhD, University of Pittsburgh	5107
4:40pm – 5:15pm	<i>The Importance of Modeling and Biomechanics to Tissue Engineered Muscle Repair and Regenerative Rehabilitation of Volumetric Muscle Loss Injuries</i>	George Christ, PhD, University of Virginia	5107
5:15pm – 5:30pm	Panel and Attendees Discussion		5107
5:30pm – 6:45pm	Sonny's BBQ and Social Networking		Bailey Park, across from Bowman Gray
Day 5: Friday, June 8th			

8:00am – 8:45am	Networking and Continental Breakfast		5th Floor
Session 9: Commercialization			
8:45am – 9:25am	<i>IP 101: Securing IP for Regenerative Medicine</i>	Julie Watson, JD, WFIRM	5107
9:25am – 10:00am	<i>Opportunities and Risks for Commercializing Novel RM Technologies</i>	Julie Watson, JD, WFIRM	5107
10:00am – 10:20am	Coffee Break		5th Floor
10:20am – 11:00am	<i>Commercialization in Action</i>	Gail Naughton, PhD, Histogen	5107
11:00am – 11:45am	<i>Patient Perspectives with Americans for Cures Patient Advocate</i>	Adrienne Bell-Cors Shapiro, Patient Advocate, with Bernard Siegel, JD, RMF (Moderator)	5107
11:45am – 12:00pm	Wrap-Up and Concluding Remarks	Joan Schanck, MPA, WFIRM	5107