#### **Sponsors-2019 McGowan Institute Retreat**







# Program 2019 McGowan Institute Retreat March 11 and 12, 2019

(As of 02/22/19)

7:30-8:30am Networking Breakfast

Location: Ballroom B

9:00-10:30am Morning Breakout Sessions (3 concurrent)

Session 1 Pulmonary Regeneration and Repair

Ballroom B

Organizers: Charlie Ren, PhD

Assistant Professor of Medical Engineering

Carnegie Mellon University

and

Keith Cook, PhD

Professor-Bioengineering Carnegie Mellon University

"Iron-Sulfur Biogenesis Controls Endothelial Dysfunction in Pulmonary Hypertension"

Stephen Chan, MD, PhD, FAHA (9:00 - 9:20am)

Director, Center for Pulmonary Vascular Biology and Medicine

Associate Professor of Medicine

Pittsburgh Heart, Lung, Blood, and Vascular Medicine Institute

Division of Cardiology, Department of Medicine

UPMC and University of Pittsburgh School of Medicine

#### "EVLP: A Human Pre-Clinical Model for Lung Therapies"

Mauricio Rojas, MD (9:25 - 9:45am)

Scientific Director Dorothy P. and Richard P. Simmons Center for Interstitial Lung Diseases

Associate Professor, Division of Pulmonary, Allergy and Critical Care Medicine Associate Professor of Clinical and Translational Research Department of Medicine, University of Pittsburgh

#### "Clinical Aspects of ex vivo Lung Perfusion"

Pablo G. Sanchez, MD, PhD, FACS (9:50 - 10:10am)
Assistant Professor of Cardiothoracic Surgery
Vice Chairman, Benign Lung Diseases
Surgical Director, Lung Transplantation and ECMO
Director, Lung Transplant Research
Director, Ex Vivo Lung Perfusion (EVLP) Program
Department of Cardiothoracic Surgery, University of Pittsburgh

#### "Thirty-Day In Vivo Evaluation of a Wearable Pumping Artificial Lung"

Ryan Orizondo, PhD (10:15 - 10:30am) Postdoctoral Associate McGowan Institute University of Pittsburgh

Each presentation will be followed by a 5 min Q&A

## Session 2 **Beyond PD1 Immunotherapy: Novel Strategies to Target the Tumor Microenvironment**

Gold Room

Organizer:
Tullia Bruno, PhD
Research Assistant Professor
Department of Immunology

University of Pittsburgh

Session Chairs: Tullia Bruno, PhD

and

Greg Delgoffe, PhD Assistant Professor Department of Immunology University of Pittsburgh

#### "Engineering Metabolic Sufficiency in Adoptive Cell Therapies for Cancer"

Greg Delgoffe, PhD (9:30 - 9:50am)

**Assistant Professor** 

Department of Immunology

University of Pittsburgh

#### "Tumor infiltrating B cells: an immunotherapy target on the rise"

Tullia Bruno, PhD (9:50-10:10am)

Research Assistant Professor

Department of Immunology

University of Pittsburgh

# "Engineering Universal CAR and SynNotch Receptors for Programmable Antigen Targeting"

Jason Lohmueller, PhD (10:10 - 10:25am)

Postdoctoral Associate

Department of Immunology

University of Pittsburgh

## "The Therapeutically Induced Matrisome (Tim) Protects and Promotes Metastatic Disease"

Andrew Bradshaw, BS (10:25 - 10:40am)

PhD Student

Department of Pathology

University of Pittsburgh

#### **Panel Discussion** (10:40 - 11:00am)

Greg Delgroffe, PhD; Tullia Bruno, PhD; Jason Lohmueller, PhD; Andrew Bradshaw, BS

#### Session 3 Importance of (Re)Vascularization

Conference Room A

Session Organizer and Chair:

Marie Billaud, PhD

Research Assistant Professor

Department of Cardiothoracic Surgery

University of Pittsburgh School of Medicine

Co-Chair: Sai Yerneni

PhD Student

Department of Biomedical Engineering

Carnegie Mellon University

#### "The Scope and Sequence of Growth Factor Delivery for Angiogenesis"

Steven Little, PhD (9:00 - 9:25am)

William Kepler Whiteford Endowed Professor and Chair

Department of Chemical and Petroleum Engineering

University of Pittsburgh Swanson School of Engineering

### "Revascularization of the aortic adventitia: a new therapeutic target for aortic disease?"

Marie Billaud, PhD (9:30 - 9:55am) Research Assistant Professor

Department of Cardiothoracic Surgery University of Pittsburgh School of Medicine

# "Decellularized Chick Chorioallantoic Membrane as an Inductive Biomaterial for Functional Blood and Lymph Vasculature"

Sai Yerneni, BS (10:00 - 10:15am)

PhD Student

Department of Biomedical Engineering

Carnegie Mellon University

**Panel Discussion** (10:15 - 10:30am)

Panelists: Steven Little, PhD; Marie Billaud, PhD; Stephen Badylak, DVM, MD,

PhD, Sai Yerneni, BS

11:00-11:30am Welcome and State of the Institute Address

William R. Wagner, PhD Director-McGowan Institute

Location: Ballroom B

11:30am-12:30pm Buffet Lunch and Roundtable topics

Ballroom B

Topics: Tables will be labeled by topic. Seating is first come, first served.

Entrepreneurship for Scientists Mentorship

Don Taylor, PhD

Working with Industry
Design Thinking for Scientific Innovation

\*\*Robert Kormos, MD\*\*

Joseph Camasky, DhD

Joseph Samosky, PhD

Academic Research vs. Start-up

Developing a Research Niche

Writing your first R01 All About Manuscripts

Research Strategy and Management

Machine Learning/Artificial Intelligence

in Regenerative Medicine

#### 1:00-2:00pm "Pop-Up" Workshops

### Workshop #1 Bioelectric Strategies to Repair, Replace and Regenerate Impaired or Damaged Tissue Systems

Ballroom B

Workshop Organizer:

Robert Kormos, MD

Brack G Hattler Professor of Cardiothoracic Transplantation

Deputy Director for the McGowan Institute for Regenerative Medicine

Professor Cardiothoracic Surgery and Bioengineering

Department of Cardiothoracic Surgery, Heart and Vascular Institute

University of Pittsburgh Medical Center

Session Chair:

Stephen Badylak DVM, PhD, MD

Professor, Department of Surgery

University of Pittsburgh

Deputy Director and Director of the Center for Pre-Clinical Tissue Engineering

McGowan Institute for Regenerative Medicine

#### "TBD"

Douglas Weber, PhD (1:00-1:15pm) Associate Professor of Bioengineering University of Pittsburgh

#### "Bioelectric Medicine: A Regenerative Approach"

Jorge Genovese, MD PhD (1:15-1:30pm)

Vice President of Electrical Stimulation Regeneration Research

BioLeonhardt LTP

Cal-X Starts Business Accelerator

Leonhardt's Launchpads Utah

#### "TBD"

"TBD"

Panel Discussion (15 min)

#### Workshop #2 Pharmaceutical Quality by Design Research and Education

Conference Room A

Workshop Organizer:

Jelena Janjic, PhD

**Associate Professor** 

School of Pharmacy

**Duquesne University** 

Workshop Chair:
James Drennen, PhD
Associate Dean for Research and Graduate Programs
Duquesne University School of Pharmacy

#### "Quality by Design: Modern Strategies for Product Development"

James K. Drennen, PhD (1:00 – 1:25pm)
Associate Dean for Research and Graduate Programs
Duquesne University School of Pharmacy

#### "Process analytical technology (PAT) technology and applications"

Carl Anderson, PhD (1:25 – 1:45pm)
Division Head
Pharmaceutical, Administrative & Social Sciences
Duquesne University School of Pharmacy

#### Panel Discussion (15 min)

Panelists: Carl Anderson, PhD; Jelena Janjic, PhD; James Drennen, PhD

#### Workshop #3 I Finished Training, Now What? Pathways to Independence

Gold Room

Workshop Organizer and Chair: Garrett Coyan, MD, MS Resident Cardiothoracic Surgery University of Pittsburgh Medical Center

#### "Institutional Environment and Support for New/Early Stage Investigators"

Arthur Levine, MD Senior Vice Chancellor for the Health Sciences John and Gertrude Petersen Dean School of Medicine University of Pittsburgh

#### "Initiating Research Collaborations"

Christopher Sciortino, MD, PhD
Assistant Professor of Cardiothoracic Surgery
Surgical Director, UPMC Advanced Heart Failure Center
Department of Cardiothoracic Surgery
University of Pittsburgh

#### "Developing an Independent Research Theme"

Fatima Syed-Picard, PhD Assistant Professor School of Dental Medicine University of Pittsburgh

#### "Finding Money"

Ryan Champagne

**Grants Development Coordinator** 

Office of Research University of Pittsburgh

2:00-2:30 Break

#### 2:30-4:00pm Afternoon Breakout Sessions (3 concurrent)

## Session 4 The 15th Anniversary of the Center for Inflammation and Regeneration Modeling

Ballroom B

Session Organizers and Chairs:

Yoram Vodovotz, PhD

Professor

Department of Surgery University of Pittsburgh

and

Gilles Clermont, MD

Professor

Department of Critical Care Medicine

University of Pittsburgh

# "The CIRM at 15: From Translational Systems Biology to Model-based Precision Medicine for Trauma"

Yoram Vodovotz, PhD (2:30-2:50pm)

Professor

Department of Surgery

University of Pittsburgh

#### "Why Modeling Sepsis?"

Gilles Clermont, MD (2:50-3:10pm)

Professor

Department of Critical Care Medicine

University of Pittsburgh

#### "Computing Stem Cell Fate Choice for Regenerative Medicine Applications"

Shibin Mathew, PhD (3:10-3:30pm)

Postdoctoral Research Fellow

Department of Cancer Biology Dana Farber Cancer Institute

Department of Genetics Harvard Medical School

#### "Kinetic Model Simulation and Antigenicity Analysis of a Miniaturized Fc-Binding Domain for Local Deposition of Antibodies"

Ngoc Pham, BS (3:30-3:40pm) PhD Student Graduate School of Pharmaceutical Sciences Duquesne University

#### Panel Discussion (20 min):

Panelists: Yoram Vodovotz, PhD; Gilles Clermont, MD; Shibin Mathew, PhD; Ngoc Pham, BS

#### Session 5 Drug Delivery Strategies in the Extracellular and Intracellular Spaces

Gold Room

Organizers:

Wilson Meng, PhD Associate Professor School of Pharmacy Graduate School of Pharmaceutical Sciences Duquesne University

and

Jelena Janjic, PhD Associate Professor School of Pharmacy Duquesne University

Session Chair: Wilson Meng, PhD

#### "Pulmonary Drug Delivery Using Perfluorocarbon Emulsions"

Keith Cook, PhD (2:30 - 3:00pm) Professor of Biomedical Engineering Carnegie Mellon University

#### "Nanoparticle-mediated CNS Drug Delivery"

Devika S. Manickam, PhD (3:00 - 3:20pm) Assistant Professor of Pharmaceutical Sciences Duquesne University

# "Protein-Polymer Conjugates with Improved Transport Properties for Oral Drug Delivery"

Katherine Fein, BS (3:20 - 3:40pm)
PhD Student
Department of Chemical Engineering
Carnegie Mellon University

#### Panel discussion (3:40 - 4:00pm)

Panelists: Keith Cook, PhD; Devika Manickam, PhD; Katherine Fein, BS

#### Session 6 Hepatic Regenerative Medicine

Conference Room A

Session Chairs: Andrew Duncan, PhD Assistant Professor Department of Pathology University of Pittsburgh

and

Jacquelyn Russell, BS PhD Student Department of Pathology University of Pittsburgh

#### "Liver Regeneration after Hepatectomy"

Satdarshan (Paul) Singh Monga, MD, FAASLD (2:30-2:55 pm)
Professor of Pathology and of Medicine
Director, Pittsburgh Liver Research Center (PLRC)
Assistant Dean for Medical Scientist Training Program (MSTP)
Director of Cellular Approaches to Tissue Engineering & Regeneration (CATER)
Training Program
University of Pittsburgh

#### "Liver Regeneration Making Living Donation Feasible"

Swaytha Ganesh, MD (2:55-3:20 pm)

**Assistant Professor** 

Department of Medicine - Division of Gastroenterology, Hepatology, and Nutrition

Medical Director of Living Donor Program - UPMC Thomas E Starzl Transplant Institute

Center for Liver Diseases University of Pittsburgh

#### "BioFabrication of Human Liver Tissue"

Alejandro Soto- Gutierrez, MD, PhD (3:20-3:45 pm) Associate Professor Department of Pathology University of Pittsburgh

# "Lack of Beta-Catenin in Hepatocytes Impairs Proliferation and Promotes Liver Progenitor Cell-Mediated Repair in Response to Hepatic Injury"

Jacquelyn Russell, BS (3:45-4:00 pm)

PhD Student

Department of Pathology University of Pittsburgh

4:00-4:30pm

4:30-5:00pm Rapid Fire Presentations

Break

Location: Ballroom B

Session Chairs:
Andrew Duncan, PhD
Assistant Professor
Department of Pathology
University of Pittsburgh

and

Evan Delgado, PhD Postdoctoral Scholar Department of Pathology University of Pittsburgh

# "Adipose-Derived Stem Cells Partially Mitigate Muscle Atrophy after Peripheral Nerve Injury in the Rodent Model"

Benjamin K. Schilling, MS PhD Student Department of Bioengineering University of Pittsburgh

# "Elucidation and Integration of Tissue-Specific, Protein-Level Inflammatory Networks following Vascularized Composite Allotransplantation"

Ali Aral, MD
Postdoctoral Scholar
Department of Surgery
University of Pittsburgh

#### "Perfused 3D Printed Collagen Tubes Support Tissue Viability"

Jacqueline Wittmer, BS PhD student Biomedical Engineering Carnegie Mellon University

#### "Cytokine Mimicking Microspheres for Use in Porous Scaffolds"

Katherine Lorentz, MS

PhD Student

Department of Bioengineering

University of Pittsburgh

#### "Biomagnetic Genetically Programmed Multicellular Microrobots"

Michael Behrens, BS

PhD Student

Department of Bioengineering

University of Pittsburgh

### "Theranostic Analgesic Regenerative Gel-Emulsion Technology (T.A.R.G.E.T.)

Platform for Local Analgesia and Promotion of Nerve Regeneration"

Mallory R. Wampler, MD Postdoctoral Scholar AIRMED/RESTOR

United States Army Institute of Surgical

5:00-7:00pm Poster Session/Evening Reception

Location: Ballroom A

5:00-6:00pm Even numbers present

6:00-7:00pm Odd numbers present

#### Tuesday-March 12, 2019

7:30-8:30am Networking Breakfast Ballroom B

8:30-9:00am **Break** 

9:00-10:30am Morning Breakout Sessions (3 concurrent)

Session 7 **Pediatric Innovations** 

Ballroom B

Organizer:

George Gittes, MD

Director

Richard King Mellon Foundation Institute for Pediatric Research; and

Co-Scientific Director
UPMC Children's Hospital

#### "PET Probe for Radioguided Surgery"

Marcus Malek, MD, FAAP Assistant Professor of Surgery Director, Pediatric Surgical Oncology Department of Surgery University of Pittsburgh

#### "Ventriculamniotic Shunt for Fetal Aqueductal Stenosis"

Stephen Emery, MD
Associate Professor
Department of Obstetrics, Gynecology, & Reproductive Sciences
Divisions of Ultrasound and Maternal-Fetal Medicine
Magee-Womens Research Institute

#### "ThreadRiteIV Catheter"

Cameron Dezfullian, MD
Assistant Professor, Adult and Pediatric Critical Care Medicine and Clinical and Translational Science
Scientist, Safar Center for Resuscitation Research
Faculty, Vascular Medicine Institute
University of Pittsburgh School of Medicine

#### "Biodegradable Magnesium Alloy-Based Tracheal Stent"

Prashant Kumta, PhD Edward R. Weidlein Chair Professor Swanson School of Engineering University of Pittsburgh

and

David Chi, MD
Associate Professor, Department of Otolaryngology
University of Pittsburgh
Clinical Director, Division of Pediatric Otolaryngology
Children's Hospital of Pittsburgh of UPMC

#### "interACTION: ACL"

Michael McClincy, MD Assistant Professor Department of Orthopaedic Surgery University of Pittsburgh

# "Bili-Hut™: Merging human centered design, usability, biomedical engineering and health economics to democratize newborn jaundice treatment"

Donna Brezinski, MD CEO and Founder Little Sparrows Technologies, Inc.

## Session 8 **Emerging Military Threats, Combat Casualty Gaps and Opportunities for Innovation**

Gold Room

Session Organizers and Chairs: Jelena Janjic, PhD Associate Professor School of Pharmacy Duquesne University

and

Margaux Salas, PhD Senior Scientist AIRMED

Session Co-Chair:
Nicholas Robbins, DO
General Surgery Resident
The Long School of Medicine
University of Texas Health San Antonio

## "Prolonged Field Care on the Multi-Domain Battlefield: Current Emphasis and Future Needs"

Margaux Salas, PhD (9:00 – 9:20am) Senior Scientist AIRMED 59th MDW U.S. Air Force

# "The AIRMED Program: Regenerative, Resuscitative and Restorative Technologies in Combat Casualty Care"

Michael Sippel, MD (9:20 – 9:40am) Surgical Resident AIRMED 59th MDW U.S. Air Force

# "Inflammation Targeted Nanomedicine for Military Applications: Design, Manufacturing and Quality Control"

Jelena M. Janjic, PhD (9:40 - 10:00am)

ORISE Faculty Fellow Principal Scientist AIRMED 59th MDW U.S. Air Force; Associate Professor Duquesne University

## "Prevention of Ischemia-Reperfusion Injury and Chronic Rejection in a Porcine Vascularized Composite Allotransplantation Model"

Nicholas L. Robbins, DO (10:00 – 10:15am) Surgical Resident AIRMED 59th MDW U.S. Air Force

#### **Panel Discussion**

Panelists: Margaux Salas, PhD, Michael Sippel, MD, PhD; Jelena Janjic, PhD; Nicholas Robbins, DO (10:15 – 10:30am)

#### Session 9 Regenerative Rehabilitation

Conference Room A

Session Organizer and Chair:
Session Organizers:
Riccardo Gottardi, PhD
Principal Investigator
Center for Pediatric Airway Disorders
Children's Hospital of Philadelphia

Session Co-Chair: Amin Cheikhi, PhD Postdoctoral Scholar Department of Physical Medicine and Rehabilitation University of Pittsburgh

# "Evaluating Clinical Outcomes of Biological Treatments and the TeMPO clinical trial (Comparing Different Types of Physical Therapy for Treating People with a Meniscal Tear and Osteoarthritis)"

James Irrgang, PT, PhD, ATC, FAPTA
Professor and Chair, Departments of Physical Therapy, Orthopaedic Surgery and
the Clinical and Translational Science Institute
University of Pittsburgh School of Medicine

#### "Peripheral Nerve Regeneration and Physical Rehabilitation"

Kacey Marra, PhD

Professor, Department of Plastic Surgery University of Pittsburgh School of Medicine

# "Exposure of Muscle Stem Cells to a Stiff Microenvironment Drives an "Aged" Mitochondrial Phenotype"

Hikaru Mamiya, BS

PhD Student

Department of Bioengineering

University of Pittsburgh

#### **Panel Discussion**

Panelists: James Irrgang, PT, PhD, ATC, FAPTA; Kacey Marra, PhD; Hikaru Mamiya, BS

#### 11:00am-12:30pm

#### Lunch

\*William Pitt Union Ballroom 3959 Forbes Ave, 1st Floor

\*Exit the University Club onto University Place, turn right and walk ½ block to Fifth Avenue. Cross Fifth Avenue and turn left. The William Pitt Union will be on your immediate right on the corner of Fifth Ave and Bigelow Blvd. Turn right once inside and follow signs to the Ballroom.

# Distinguished Lecture: "Lessons in regenerative medicine translation: are we designing for the right therapeutic target?"

Jennifer Elisseeff, PhD

Professor of Ophthalmology

Director of the Translational Tissue Engineering Center

Johns Hopkins University

#### 1:00-2:00pm "Pop-Up" Workshops (3 concurrent)

#### Workshop #1 Wearable Biosensors

Ballroom B

Session Organizers and Chairs:

Jana Kainerstorfer, PhD

**Assistant Professor** 

Department of Biomedical Engineering

Carnegie Mellon University

and

Carmel Majidi, PhD Associate Professor

Department of Mechanical Engineering

Carnegie Mellon University

# "Continuous Monitoring and Treatment Opportunities, Applications and Challenges Using Biosensing Stickers"

Brian Stancil, PhD President Lifeware Labs

#### "Parylene Photonics: A New Platform for Flexible Optoelectronic Sensors"

Maysam Chamanzar, PhD
Assistant Professor
Department of Electrical and Computer Engineering
Carnegie Mellon University

## "Monitoring of Cerebral Perfusion Continuously and at the Bedside with Near-Infrared Light"

Jana Kainerstorfer, PhD Assistant Professor Department of Biomedical Engineering Carnegie Mellon University

# "Microneedles Arrays for Transdermal and Intradermal Deliver of Bioactive Molecules and their Application for Endogenous Sensing"

Burak Ozdoganlar, PhD Professor Department of Mechanical Engineering Carnegie Mellon University

#### Workshop #2 Malignant Pleural Effusion: When Push Comes to Shove

Gold Room

Session Organizers and Chairs: Michael Lotze, MD Professor of Surgery and Bioengineering University of Pittsburgh

and

Rajeev Dhupar, MD, MPA
Assistant Professor of Cardiothoracic Surgery
Chief, Thoracic Surgery, VAMC of Pittsburgh
Department of Cardiothoracic Surgery
University of Pittsburgh

and

Chigozirim Ekeke, MD Cardiothoracic Surgery Resident University of Pittsburgh Medical Center

#### "Current Therapies for Malignant Pleural Effusion"

Chigozirim Ekeke, MD

Cardiothoracic Surgery Resident

University of Pittsburgh Medical Center

#### "Oncolytic Vaccinia Virus Delivering Cytokines – Trials and Tribulations"

David Bartlett, MD

Bernard Fisher Professor of Surgery

University of Pittsburgh School of Medicine

#### "Novel Immune Approaches to the Pleural Space"

Rajeev Dhupar, MD, MPA

Assistant Professor of Cardiothoracic Surgery

Chief, Thoracic Surgery, VAMC of Pittsburgh

**Department of Cardiothoracic Surgery** 

University of Pittsburgh

#### "Therapeutic Targeting of The Pleural Effusion Environment"

Vera Donnenberg, PhD

**Associate Professor** 

Department of Cardiothoracic Surgery

University of Pittsburgh School of Medicine

#### Workshop #3 LifeX

Conference A

Organizer:

Mara McFadden, MBA

VP of Product and Medical Devices

LifeX Ventures

2:00-2:30 Break

2:30-4:00pm Afternoon Breakout Sessions (3 concurrent)

Session 10 Let's Talk Science: Communicating Your Research to Different Audiences

Ballroom B

Session Organizers and Chairs:

Arvind Suresh, MS

Manager, Science Writing UPMC Media Relations

and

Erin Hare, PhD Manager, Science Writing UPMC Media Relations

#### "Business Basics: Pitching your invention to potential partners "

Tony Torres
Entrepreneur in Residence
University of Pittsburgh

#### "Science in the News: What Makes Your Research Interesting to a Reporter"

Liz Reid Health & Science Editor 90.5 WESA FM

#### "Being Social: Do's and Don'ts of Talking Science on Social Media"

Vaughn Cooper, PhD Professor Department of Microbiology and Molecular Genetics University of Pittsburgh

#### **Panel Discussion**

Panelists: Tony Torres; Liz Reid; Vaughn Cooper, PhD

#### Session 11 Image-Guided Therapeutic Delivery in Regenerative Medicine

Location: Gold Room

Session Organizer and Chair: Michel Modo, PhD Professor Department of Radiology University of Pittsburgh

#### "Image-Guided Intra-Arterial Delivery of Cell Therapy for Stroke"

Piotr Walczak, PhD Assistant Professor Department of Radiology Johns Hopkins University

# "Unmet Needs and Opportunities for Regenerative Medicine in Interventional Neuroradiology"

Monica Pearl, MD, DABR
Associate Professor, Interventional Neuroradiology
Director, Interventional Neuroradiology Fellowship Program
Director of Faculty Experience, Department of Radiology
Johns Hopkins University

# "Interventional PET for Precise and Quantitative Monitoring of the Delivery of Biologicals to the Brain"

Miroslaw Janowski, MA, MD, PhD Associate Professor Department of Radiology Johns Hopkins University

## "In vivo Non-Invasive Monitoring of the Immune Response to ECM Hydrogel Implantation"

Michel Modo, PhD Professor Department of Radiology University of Pittsburgh

# "Development of Imaging Nanoparticles for Translational MR Imaging in Regenerative Medicine"

Charlie O'Hanlon President and CEO CelSense

#### Session 12 Microphysiological Tissue Chip for Drug Development

Conference Room A

Session Organizers: Riccardo Gottardi, PhD Principal Investigator Center for Pediatric Airway Disorders Children's Hospital of Philadelphia

and

Hang Lin, PhD
Assistant Professor
Department of Orthopaedic Surgery
University of Pittsburgh School of Medicine

Session Chairs:
Hang Lin, PhD
Assistant Professor
Department of Orthopaedic Surgery
University of Pittsburgh School of Medicine

and

Alessandro Pirosa, PhD
Postdoctoral Researcher
Department of Orthopaedic Surgery
University of Pittsburgh

# "Development of Human MSC-Based Organotypic Cultures for Toxicity Testing"

Peter Alexander, PhD Assistant Professor Department of Orthopaedic Surgery University of Pittsburgh

## "iPSC-Based Three-Dimensional Neuronal Platforms for Modeling CNS Infections and Drug Screening"

Leonardo D'Aiuto, PhD Research Instructor Department of Psychiatry University of Pittsburgh

#### "Organ-on-a-Chip System for the Modeling of Synovial Joint Pathologies"

Zhong Li, PhD
Postdoctoral Associate
Department of Orthopaedic Surgery
University of Pittsburgh

#### **Panel Discussion**

Panelists: Peter Alexander, PhD; Leonardo D'Aiuto, PhD; Zhong Li, PhD

#### 4:00-5:00pm

# Regenerative Medicine Forum-Open to the Public "Hope vs. Hype of Stem Cell Therapy"

Ballroom B

Organizer:
Bryan Brown, PhD
Assistant Professor
Department of Bioengineering
Swanson School of Engineering
University of Pittsburgh

Moderator: Bill Flanagan Chief Corporate Relations Officer Allegheny Conference

Panel Discussion:

J. Peter Rubin, MD, FACS
UPMC Endowed Professor and Chair of Plastic Surgery
Chair of Plastic Surgery
Director, UPMC Wound Healing Services
Professor of Bioengineering
University of Pittsburgh

Carl Kurlander

Documentarian and Filmmaker Visiting Distinguished Senior Lecturer Faculty Adviser, Pitt In Hollywood University of Pittsburgh

Michael Hufford, PhD CEO, Lygenesis, Inc.

Vice President for Regulatory Affairs, Behavioral Science, and Innovation

**Pinney Associates** 

5:00pm Poster Awards

Ballroom B

Presenter:

Andrew Duncan, PhD Assistant Professor Department of Pathology University of Pittsburgh

5:00-6:00pm Meet the Researchers Poster Session and Reception

Ballroom A

All poster presenters