

Sponsors-2019 McGowan Institute Retreat

PittMcGowan



PittsciVelo
In partnership with Innovation Institute

Program 2019 McGowan Institute Retreat March 11 and 12, 2019

(As of 01/11/19)

7:30-8:30am

Networking Breakfast

Location: Ballroom B

8:30-9:00am

Welcome and State of the Institute Address

William R. Wagner, PhD

Director-McGowan Institute

Location: Ballroom B

9:30-11:00am

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 (20 minutes)

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 (20 minutes)

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 (20 minutes)

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

Selection from abstracts (15 minutes)

Each presentation will be followed by a 3-4 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

Selected talks from abstracts (3) (10:10-10:40am)

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

Session 3

Drug Delivery Strategies in the Extracellular and Intracellular Spaces
Conference Room A

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 (9:30 am – 10:00 am)
Professor of Biomedical Engineering
Carnegie Mellon University

“Nanoparticle-mediated CNS Drug Delivery”

Devika S Manickam, PhD (10:00 am – 10:20 am)
Assistant Professor of Pharmaceutical Sciences
Duquesne University

Selection from abstracts – TBA (10:20 am – 10:40 am)

Roundtable discussion (10:40 am – 11:00 am)

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

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

Workshop #1 **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 (25min)
Associate Dean for Research and Graduate Programs
Duquesne University School of Pharmacy

"Process analytical technology (PAT) technology and applications"

Carl Anderson, PhD (20min)
Division Head
Pharmaceutical, Administrative & Social Sciences
Duquesne University School of Pharmacy

Panel Discussion (15 min) – discussion led by Drs. Wildfong, Janjic, and Drennen

Workshop #2 **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

Title: TBA

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

Title: TBA

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

Title: TBA

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

Title: TBA

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
Professor
Department of Surgery
University of Pittsburgh

“Why Modeling Sepsis?”

Gilles Clermont, MD

Professor
Department of Critical Care Medicine
University of Pittsburgh

“Computing Stem Cell Differentiation for Regenerative Medicine Applications”

Ipsita Banerjee, PhD
Associate Professor
Department of Chemical and Petroleum Engineering
University of Pittsburgh

Speaker selected from abstracts – TBD

Session 5

Importance of (Re)Vascularization

Gold Room

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 (25 minutes presentation + 5 minutes Q&A)
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 (25 minutes presentation + 5 minutes Q&A)
Research Assistant Professor
Department of Cardiothoracic Surgery
University of Pittsburgh School of Medicine

Speaker selected from abstracts – TBD (12 minutes presentation + 3 minutes Q&A)

Panel Discussion (15 minutes)

Session 6

Hepatic Regenerative Medicine

Conference Room A

Session Organizer and Chair:

Paul Monga, MD
Professor of Pathology
Vice-Chair of Experimental Pathology
Department of Pathology
University of Pittsburgh

“Cellular and Molecular Basis of Liver Regeneration”

George Michalopoulos, MD, PhD (2:30-2:55 pm)
Professor and Chair
Department of Pathology
University of Pittsburgh

“Living Donor Transplantation Program”

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

Selection from abstracts (3:45-4:00 pm)

4:00-4:30pm

Break

4:30-5:00pm

Rapid Fire Presentations

Location: Ballroom B

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

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

Col. Erik Weitzel, MD
Deputy Commander
U.S. Army Institute of Surgical Research
U.S. Army Medical Research and Materiel Command

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

Speakers TBD

Panel Discussion

Session 9 **Regenerative Rehabilitation**
Conference Room A

Session Organizer and Chair: Riccardo Gottardi, PhD
Session Co-chair: Benjamin Rothrauff, PhD

“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

Selection from abstracts – TBD

Panel Discussion

11:00am-12:30pm

Lunch

Alumni Hall or WPU Assembly Room

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

Jennifer Elisseff, 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

“TBD”

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

Raj Dhupar, MD
Assistant Professor of Cardiothoracic Surgery
University of Pittsburgh

Session Co-chair:

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

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
Office of University Communications
University of Pittsburgh

and

Erin Hare, PhD
Manager, Science Writer
UPMC Media Relations

Talking about your science to industry and investors

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

Session 11

Image-Guided Therapeutic Delivery in Regenerative Medicine

Location: Gold Room

Session Organizer and Chair:
Michael 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”

Mirosław 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 Chair:

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

Panel Discussion

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
Vice President for Regulatory Affairs, Behavioral Science, and Innovation
Pinney Associates

5:00-6:00pm

Meet the Researchers Poster Session and Reception
Ballroom A
All poster presenters