Sponsors-2019 McGowan Institute Retreat







Program 2019 McGowan Institute Retreat March 11 and 12, 2019

(As of 12/20/18)

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

Organized by Charlie Ren, PhD Assistant Professor-Bioengineering

Carnegie Mello University

...and

Keith Cook, PhD

Professor-Bioengineering Carnegie Mello University Location: Ballroom B

"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

Organized by Tullia Bruno, PhD Research Assistant Professor Department of Immunology University of Pittsburgh

Session Chairs: Tullia Bruno, PhD and

...and
Greg Delgoffe, PhD
Assistant Professor
Department of Immunology
University of Pittsburgh
Location: Gold Room

Title: TBD

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**

Organized by Wilson Meng, PhD and Jelena Janjic, PhD

Session Chair: Wilson Meng, PhD Location: Conference Room A

"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 Pharmaceutics

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

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

Location: Conference Room A

"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

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

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 R Regenerative Medicine

Session Organizers and Chairs: Yoram Vodovotz, PhD

Professor in the Department of Surgery

University of Pittsburgh

...and

Gilles Clermont, MD

Professor of Critical Care Medicine

University of Pittsburgh Location: Ballroom B

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

Yoram Vodovotz, PhD Professor of Surgery University of Pittsburgh

Session 5 Importance of (Re)Vascularization

Session Organizer and Chair: Marie Billaud, PhD

Co-Chair: Sai Yerneni,

PhD Student, Biomedical Engineering,

Carnegie Mellon University

Location: Gold Room

"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**

Session Organizer and Chair: Paul Monga, MD

Professor of Pathology

Vice-Chair of Experimental Pathology,

Department of Pathology University of Pittsburgh Location: Conference Room A

Swaytha Ganesh, MD (2:30-2:55 pm)

"Living Donor Transplantation Program"

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

"Cellular and Molecular Basis of Liver Regeneration"

George Michalopoulos, MD, PhD (2:55-3:20 pm)

Professor and Chair Department of Pathology 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**

Organized by George Gittes, MD

Director of the Richard King Mellon Foundation Institute for Pediatric Research

and Co-Scientific Director at UPMC Children's Hospital

Location: Ballroom B

"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**

Session Organizers and Chairs: Jelena Janjic, PhD and Col. Erik Weitzel, MD

Session Co-Chair: Nicholas Robbins, DO

Location: Gold Room

Speakers TBD

Panel Discussion

Session 9 Regenerative Rehabilitation

Session Organizer and Chair: Riccardo Gottardi, PhD

Session Co-chair: Benjamin Rothrauff, PhD

Location: Conference Room A

"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 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

Session Organizers and Chairs: Jana Kainerstorfer, PhD

Professor

Department of Biomedical Engineering

Carnegie Mellon University

...and

Carmel Majidi, PhD Associate Professor

Department of Mechanical Engineering

Carnegie Mellon University

Location: Ballroom B

"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
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
Department of Biomedical Engineering
Carnegie Mellon University

"TBD"

Burak Ozdoganlar, PhD Professor, Mechanical Engineering Carnegie Mellon University

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

Session Organizers and Chairs: Michael Lotze, MD
Professor of Surgery and Bioengineering
University of Pittsburgh
...and
Raj Dhupar, MD
Assistant Professor of Cardiothoracic Surgery

Assistant Professor of Cardiothoracic Surgery

University of Pittsburgh

Session Co-chair: Chigozirim Ekeke, MD University of Pittsburgh Medical Center

Location: Gold Room

Workshop #3 LifeX

Organized by Mara McFadden, MBA VP of Product and Medical Devices

LifeX Ventures

Location: Conference A

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

Session Organizes and Chairs: Arvind Suresh, MS and Erin Hare, PhD

UPMC Media Relations Location: Ballroom B

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

Walid F. Gellad, MD, MPH

Associate Professor of Medicine, Director, Center for Pharmaceutical Policy and

Prescribing

University of Pittsburgh

Panel Discussion

Session 11 Image-Guided Therapeutic Delivery in Regenerative Medicine

Session Organizer and Chair: Michael Modo, PhD

Location: Gold Room

"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

"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

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

Session Organizers: Riccardo Gottardi, PhD Research Assistant Professor Department of Orthopaedic Surgery, University of Pittsburgh. ...and

Hang Lin, PhD

Research Assistant Professor University of Pittsburgh

Session Chair: Hang Lin, PhD Location: Conference Room A

Panel Discussion

4:00-5:00pm Regenerative Medicine Forum-Open to the Public

"Hope vs. Hype of stem Cell Therapy" Organized by Bryan Brown, PhD

Location: Ballroom B

Moderator: Bill Flanagan- 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 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

Location: Ballroom A All poster presenters