

Pediatric Research

Pediatric research is prospering and expanding in Pittsburgh through the unique, multi-institutional Pediatric Device Initiative (PDI). Children's Hospital of Pittsburgh (CHP) and the McGowan Institute for Regenerative Medicine have formed a close partnership that combines the clinical strengths of one of the nation's leading pediatric healthcare providers (CHP) and the research strengths of a global translational research and development enterprise (McGowan Institute). Together this partnership aims to transform the status of the pediatric population that has been underserved by recent advances in treating tissue and organ failure.

Register by email at
whartonkm@upmc.edu

or phone

412-624-5293



**McGOWAN INSTITUTE
FOR REGENERATIVE MEDICINE**
Regeneration Through Innovation™

Pediatric Device Initiative
McGowan Institute for Regenerative Medicine
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Pittsburgh, PA 15219
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412-624-5293



Pediatric Innovation Retreat

Wednesday, January 25, 2017
University Club
University of Pittsburgh

Hosted by:



**McGOWAN INSTITUTE
FOR REGENERATIVE MEDICINE**
Regeneration Through Innovation™

3:00 pm – 3:05 pm

Welcome Remarks

George Gittes, MD, Children's Hospital of Pittsburgh

3:05 pm – 4:45 pm

Session A: Current barriers and opportunities for pediatric technology innovation.

"Pediatric Medical Device Innovation – Collision and Synergy between Academics and Capitalists"

Matthew R. Maltese, PhD, Executive Director, Philadelphia Pediatric Device Consortium

An Industry Perspective on Barriers to Development of Pediatric Devices

Kurt Dasse, PhD, CEO, GENo

Regulatory Perspective

Eric Chen, MS, Director, Humanitarian Use Devices Program OOPD, FDA

Clinical Perspective

Pedro del Nido, MD, Boston Children's Hospital

Moderator: *Harvey Borovetz, PhD Professor and former Chair, Department of Bioengineering, Swanson School of Engineering;*

4:45 pm – 5:00 pm — Refreshment Break

5:00 pm—6:00 pm

Session B: Clinical Challenges and Innovative Technology Solutions

"Respiratory & Cardiovascular Support Technology for Pediatrics"

William Federspiel PhD, McGowan Institute

"Challenges for Children with Craniofacial Disorders"

Brian Martin, MD, Children's Hospital of Pittsburgh

"Clinical Needs for Vision Restoration in Children"

Ken Naschal, MD, Children's Hospital of Pittsburgh

"Restoring Appearance and Function—Reconstructive Surgery"

J. Peter Rubin, MD FACS, University of Pittsburgh Joseph Losee, MD, Children's Hospital of Pittsburgh

Moderator: *William Federspiel, PhD, William Kepler Whiteford Professor, Department of Bioengineering, Swanson School of Engineering*

6:00 pm—6:40 pm

Session C: Resources for Effective Translation

"Technology Commercialization Preparation and Pathways"

Don Taylor, PhD, sciVelo

"Intellectual Property Management and Licensing"

Alex Ducruet, PhD, Innovation Institute

"Pre-clinical Study Management - McGowan Center for Pre-Clinical Studies"

Shawn Bengston, RQAP-GLP, McGowan Institute

"Swanson School of Engineering, Device Engineering and Prototyping"

David Vorp, PhD, Swanson School of Engineering

Moderator: *Donald P. Taylor, PhD, Assistant Vice Chancellor for Commercial Translation in the Health Sciences*

6:40 pm — 7:30 pm

Networking Reception and Poster Presentations

Poster Presentations

Ventriculoamniotic Shunt for Fetal Aqueductal Stenosis

Stephanie Greene MD & Youngjae Chun, PhD

Enhanced External Counter Pulsation (EECP)

Ergin Kocyildirim, MD, & Victor Morell, MD

Novel Degradable Composite Stents for Airway Obstruction Treatment in Pediatric Patients

Prashant Kumta, PhD & David Chi, MD

Rebuilding Renal Functions for Chronic Kidney Disease in Children

Eric Lagasse, PhD & Carlton Bates, PhD

Mechanisms for Growth Plate Injury and Therapeutic Repair

Juan Taboas, PhD, & Kurt Weiss, MD

Prevention of Esophageal Strictures after Cautic Esophageal Injury with an ECM hydrogel

Stephen F. Badylak, MD, PhD, DVM & Sohail Husain, PhD

Improved Elastogenesis for Pediatric Patients with Genetic Defects of the Aorta

Victor Morell, MD

Pittsburgh Pediatric Ambulatory Lung (P-PAL)

William Federspiel, PhD

Bioabsorbable Stented Heart Valves

William R. Wagner, PhD

Pediatric Esophageal Reconstruction

Stephen F. Badylak, MD, PhD, DVM

3D-printing of Complex Lung Lesions

Stefan Scholz, MD, PhD, FACS, FAAP

7:30 pm

Concluding Remarks

William R. Wagner, PhD, Director McGowan Institute