2018 McGowan Retreat Poster Awards

Sponsored by sciVelo First place: \$200

Second place: \$125 Third place: \$75

Cell and Gene Therapy

First Place

Patrick Wilkinson

A role for polyploid hepatocytes in liver repopulation and adaptation to chronic injury

Mentor: Andrew Duncan, PhD

Dept. of Pathology, McGowan Institute

University of Pittsburgh

Second Place

Matthew Rannals

Targeted translatome profiling using in utero gene transfer identifies ion channel pathophysiology in a brain development model of transcription factor 4 (TCF4) function

Mentor: Nathan Urban, PhD

Dept. of Neurobiology University of Pittsburgh

Third Place

Aaron Sun

Differences in Neural Stem Cell Identity and Differentiation Capacity Modulate Divergent

Regenerative Outcomes in Lizards and Salamanders

Mentors: Thomas Lozito, PhD; Rocky Tuan, PhD Dept. of Orthopaedic Surgery, McGowan Institute

University of Pittsburgh

Computation and Modeling

First Place

Ehab Tamimi

Computationally optimizing the compliance of biopolymer tissue engineered vascular grafts

Mentor: Jonathan Vande Geest, PhD

Dept. of Bioengineering, McGowan Institute

University of Pittsburgh

Second Place

Reza Behkam

The aorta and vocal fold paralysis: is there a connection?

Mentor: Jonathan Vande Geest, PhD

Dept. of Bioengineering, McGowan Institute

University of Pittsburgh

Third Place

Lukas Schimunek

Controllability Analysis of Protein-Protein Interaction Networks for Antiviral Drug Development

Mentor: Yoram Vodovotz, PhD

Dept. of Surgery, McGowan Institute University of Pittsburgh

Medical Devices

First Place

Firuz Feturi

Enzyme Responsive-Release Hydrogel for Targeted Immunosuppression in Vascularized

Composite Allotransplantation Mentor: Vijay Gorantla, MD, PhD

Dept. of Plastic and Reconstructive Surgery, McGowan Institute

University of Pittsburgh

Second Place

Aimon Iftikhar

A Clinically Relevant Rabbit Surgical Model of Pelvic Reconstruction to Evaluate the

Regenerative Immune Response to Novel Surgical Materials

Mentor: Bryan Brown, PhD

Dept. of Bioengineering, McGowan Institute

University of Pittsburgh

Third Place

Eoghan Cunnane

Developing urinary catheter safety devices and improving tissue engineered urethral scaffolds

through an enhanced understanding of human urethral biomechanics

Mentors: Michael Walsh, PhD; David Vorp, PhD

School of Engineering, Bernal Institute, University of Limerick

Dept. of Bioengineering, McGowan Institute, University of Pittsburgh

Tissue Engineering

First Place

Sahil Rastogi

Graphene-based Biocompatible and Transparent Micro-Electrode Arrays for Simultaneous

Electrical and Optical Measurements of Electrogenic Cells

Mentor: Tzahi Cohen-Karni, PhD Dept. of Biomedical Engineering Carnegie Mellon University

Second Place

Lindsey Saldin

Extracellular Matrix Hydrogel Downregulates Neoplastic Esophageal Cell Phenotype

Mentor: Stephen Badylak, DVM, PhD, MD Dept. of Bioengineering, McGowan Institute

University of Pittsburgh

Third Place

Harman Ghuman

ECM hydrogel injection for the treatment of stroke: Time course comparison of hydrogel

retention and phenotypic characterization of invading cells

Mentor: Mike Modo, PhD

Dept. of Radiology, McGowan Institute University of Pittsburgh

People's Choice

First Place

Vishal Rakshe

Shape Dependent Effects of Nanomaterials on Macrophage Polarization

Mentor: Shilpa Sant, PhD

Dept. of Pharmaceutical Science, McGowan Institute

University of Pittsburgh

Second Place

Akhil Patel

RegenMatrix: A Growth Factor-free Bone Graft for Craniofacial Bone Regeneration

Mentor: Shilpa Sant, PhD

Dept. of Pharmaceutical Science, McGowan Institute

University of Pittsburgh

Third Place

Karis Kosar

Treatment of a Mouse Model of Cholestasis with a Thyromimetic Improves Biliary Injury but

Exacerbates Hepatocyte Injury

Mentor: Kari Nejak-Bowen, PhD, MBA Dept. of Pathology, McGowan Institute

University of Pittsburgh

CATER Program

Awards by CATER First place: \$200 Second place: \$125

Third place: \$75

For these awards we can use the same basic template as the other McGowan awards OR we can use the CATER template from Katy. If you use the CATER template, please remove the signature from Paul Monga. You can put my name and I will sign:

Andrew W. Duncan, Assistant Director

First Place

Aaron Sun

Differences in Neural Stem Cell Identity and Differentiation Capacity Modulate Divergent

Regenerative Outcomes in Lizards and Salamanders Mentors: Thomas Lozito, PhD, and Rocky Tuan, PhD

Dept. of Orthopaedic Surgery, McGowan Institute

University of Pittsburgh

Second Place

Colin Beckwitt

Adjuvant Statin Therapy Efficacy is dictated by Tumor Dormancy and Statin Lipophilicity in ex vivo and in vivo Models of Metastatic Breast Cancer

Mentor: Alan Wells, MD, DMS

Dept. of Pathology University of Pittsburgh

Third Place

Jacquelyn Russell

Lack of Beta-catenin in Hepatocytes Impairs Proliferation and Promotes Liver Progenitor Cell-Mediated Repair in Response to the Choline-Deficient Ethionine-Supplemented Diet

Mentor: Paul Monga, MD

Dept. of Pathology University of Pittsburgh