



17TH MIDWEST PLATELET CONFERENCE
OCTOBER 25-26, 2018

Host: Oklahoma Medical Research Foundation (OMRF)

Organizing Committee:

Lijun Xia,
OMRF
Lijun-Xia@omrf.org

Ray Rezaie,
OMRF
Ray-Rezaie@omrf.org

Michael Holinstat,
University of Michigan
Mholinst@med.umich.edu

Sidney Whiteheart,
University of Kentucky in Lexington
Whitehe@uky.edu

Advisory Committee: Rodger McEver, Gilbert White, Edward Plow, Peter Newman,
James Morrissey, Evan Sadler, Leslie Parise, Xiaoping Du & Susan Smyth

Meeting Secretary: Mia Pederson-Rambo, Mia-Pederson-Rambo@omrf.org, (405) 271-7048

Program: Thursday, October 25, 2018

7:00 – 8:00 AM	Registration, Lytle Foyer Poster set up, Lytle Foyer Breakfast, Conference Center A	9:20 – 9:35 AM	Role of somatic mutations and clonal thrombopoiesis in immune thrombocytopenia Sami Ibrahim, MD, Stephenson Cancer Center, University of Oklahoma Health Sciences Center
8:00 – 8:10 AM	Conference Opening/Welcoming Remarks Lijun Xia/Rodger McEver, Wileman Auditorium	9:35 – 9:50 AM	Exomes as a risk factor of cancer-associated thrombosis Tejasyi Dudiki, PhD, Cleveland Clinic
8:10 – 9:50 AM	Session I: Biogenesis and Clearance Wileman Auditorium Chairs: Gilbert White, MD (Blood Center of Wisconsin) Rodger McEver, MD (OMRF)	9:50 – 10:05 AM	Coffee break - Conference Center A
8:10 – 8:30 AM	Role of Platelet GPIIb/IIIa in TPO Production Heyu Ni, MD, PhD, University of Toronto	10:05 – 12:05 PM	Session II: Adhesion, Aggregation, and Secretion Wileman Auditorium Chairs: Edward Plow, PhD (Cleveland Clinic – Lerner Research Institute), Peter Newman, PhD (Blood Center of Wisconsin)
8:30 – 8:50 AM	Mitochondria and platelet cell death Shawn Jobe, MD, PhD, Blood Center of Wisconsin	10:05 – 10:25 AM	GPIIb-IX mechanosensory domain and Bernard-Soulier syndrome Renhao Li, PhD, Emory University
8:50 – 9:05 AM	Novel strategies for the use of CRISPR/Cas9 to edit the genes of iPS cells prior to their differentiation into megakaryocytes so as to generate platelets with improved hemostatic effectiveness Alyssa Moroi, PhD, Blood Center of Wisconsin	10:25 – 10:45 AM	The small GTPase Rap1 as a master regulator of platelet activation: from bench to clinic, and back Wolfgang Bergmeier, PhD, University of North Carolina School of Medicine
9:05 – 9:20 AM	Inter-individual differences in PAR4 activation Benjamin Tourdot, PhD, University of Michigan Medical School	10:45 – 11:05 AM	A specific phosphorylation event regulates the function of kindlin-3 in hematopoietic and non-hematopoietic cells Edward Plow, MD, Cleveland Clinic

- 11:05 – 11:20 AM Maternal anti- α Ib alloantibodies may disrupt hematopoietic stem cell migration and distribution in fetal and neonatal alloimmune thrombocytopenia
Brigitta Elaine Oswald, MSc candidate, University of Toronto
- 11:20 – 11:35 AM Platelet Vesicle-Associated Membrane Proteins (VAMPs) control thrombosis and hemostasis
Smita Joshi, PhD, University of Kentucky Lexington
- 11:35 – 11:50 AM New Mechanisms regulating platelet ROS generation
M. Keegan Delaney, PhD, University of Illinois at Chicago
- 11:50 – 12:05 PM Stable isotope-resolved metabolomics (SIRM) reveals extensive metabolic reprogramming during platelet activation
Qingjun Wang, PhD, University of Kentucky College of Medicine
- 12:05 – 2:00 PM Poster session, Lytle Foyer
Lunch provided concurrently, Conference Center A

2:00 – 3:40 PM Session III: Platelet and Coagulation
Wileman Auditorium

Chairs: Charles Esmon, PhD (OMRF)
James Morrissey, PhD (University of Michigan)

- 2:00 – 2:20 PM Platelet TFPI α : The function of an anticoagulant protein in a procoagulant cell
Alan Mast, PhD, Blood Research Institute/Blood Center of Wisconsin
- 2:20 – 2:40 PM Plasma and platelet FXIII in venous thrombosis
Alisa S. Wolberg, PhD, UNC School of Medicine at Chapel Hill
- 2:40 – 2:55 PM Inorganic polyphosphate amplifies HMGB1-mediated von Willebrand factor release and platelet string formation on endothelial cells
Indranil Biswas, PhD, OMRF
- 2:55 – 3:10 PM The role of platelet-derived polyphosphate in coagulation
Stephanie Smith, PhD, University of Michigan
- 3:10 – 3:25 PM Determining the role of platelets in the pathogenesis of venous thrombosis (VT)
Jean Marie Mwiza, PhD candidate, University of North Carolina
- 3:25 – 3:40 PM Platelet specific deletion of UCP-2 reduces frequency of thrombus formation
Rhonda Souvenir, PhD, University of Iowa, Carver College of Medicine
- 3:40 – 3:55 PM Coffee break - Conference Center A
- 3:55 – 5:45 PM Session IV: Platelets, Diseases, and Animal Models**
Wileman Auditorium
Chairs: Xiaoping Du, MD, PhD (University of Illinois at Chicago), Lisa Jennings, PhD (University of Tennessee)

- 3:55 – 4:15 PM Platelet pattern recognition receptors, altered-self ligands and atherothrombosis
Eugene Podrez, MD, PhD, Cleveland Clinic – Lerner Research Institute
- 4:15 – 4:35 PM Genetic analysis of hemostasis in mice
Nigel Mackman, MD, PhD, University of North Carolina School of Medicine at Chapel Hill
- 4:35 – 4:55 PM Role of platelet protein disulfide isomerase in platelet-neutrophil interactions under thromboinflammatory conditions
Jaehyung Cho, PhD, University of Illinois at Chicago College of Medicine
- 4:55 – 5:15 PM α -granule cargo release is initiated by SNARE-dependent matrix decondensation in mouse platelets
Brian Storrie, PhD, University of Arkansas for Medical Sciences
- 5:15 – 5:30 PM Ticagrelor reduces thromboinflammatory markers in patients with pneumonia
Travis Sexton, PhD, University of Kentucky College of Medicine
- 5:30 – 5:45 PM Targeting thymidine phosphorylase for thrombotic diseases: How far are we?
Wei Li, MD, PhD, Marshall University Joan C. Edwards School of Medicine
- 6:00 – 9:00 PM Conference Reception/Dinner at Oklahoma's National Cowboy & Western History Museum

Friday, October 26, 2018

- 7:00 – 8:00 AM Registration, Lytle Foyer
Poster Session, Lytle Foyer
Breakfast, Conference Center A
- 8:00 – 9:50 AM Session V: Platelets, Diseases, and Translational Research**, Wileman Auditorium
Chairs: James George, MD (University of Oklahoma), Susan Smyth, MD, PhD (University of Kentucky)
- 8:00 – 8:20 AM Pathogenesis of Thrombotic Microangiopathy
X. Long Zheng, MD, PhD, The University of Alabama Birmingham
- 8:20 – 8:40 AM Platelets and the Progression of Ovarian Cancer
Vahid Afshar-Kharghan, MD, University of Texas MD Anderson Cancer Center
- 8:40 – 9:00 AM Inflammation regulates platelet gene expression and function.
Matthew Rondina, MD, University of Utah Health Sciences Center
- 9:00 – 9:20 PM Autocrine activation of human platelets by epidermal growth factor and EGF receptor-dependent tumorigenesis
Thomas McIntyre, PhD, Lerner Research Institute, Cleveland Clinic



9:20 – 9:35 PM Targeting 12-LOX for limiting thrombosis without significant effects on bleeding.
Reheman Adili, MD, University of Michigan Medical School

9:35 – 9:50 PM Increased activated platelet binding to T cells in lung cancer patients is correlated with history of thrombosis
Claire Meikle, MD, PhD candidate, University of Toledo College of Medicine

9:50 – 10:05 AM Coffee break - Conference Center A

10:05 – 11:40 AM Session VI: Emerging Trends
Wileman Auditorium
Chairs: Leslie Parise, PhD (UNC at Chapel Hill), Nigel Mackman, PhD (UNC at Chapel Hill)

10:05 – 10:25 AM Inflammasome activation triggers DIC: a novel mechanism of thrombocytopenia in sepsis
Zhenyu Li, MD, PhD, University of Kentucky College of Medicine

10:25 – 10:45 AM Analysis of protease activated receptor mechanism by hydrogen deuterium exchange
Marvin Nieman, PhD, Case Western Reserve University

10:45 – 11:05 AM Phenotyping platelets in hemodynamic settings of thrombosis and hemostasis
Scott Diamond, PhD, University of Pennsylvania

11:05 – 11:25 AM Platelet TGF- β in aortic valve fibrosis
Jasim Ahamed, PhD, OMRF

11:25 – 11:40 AM Identification of highly conserved ADAMTS-13 domains essential for allosteric regulation using phylogenetic and functional analysis
Joshua Muia, PhD, Washington University School of Medicine, St. Louis

11:40 – 11:55 AM Closing Remarks/Adjourn
Wileman Auditorium
Boxed lunch provided - Conference Center A