April 28 – 30, 2022 | 10th Symposium on Hemostasis Coagulation, Platelets and Transfusion Medicine

THURSDAY, April 28, 2022
Old Well Room with Gallery

6:00pm Registration and Welcome Reception

7:00 Keynote Address
Introduction: Kellie Machlus, PhD and Dougald Monroe, PhD
Speaker: Katherine A. High, MD

7:45 – 8:00 Trainee Introductions

8:00 – 9:00 Reception, Old Well Room

FRIDAY, April 29, 2022
All sessions will be held in the Hill Ballroom

7:30 – 8:10am Continental Breakfast in Chancellor Ballroom

8:15 Welcome
Kellie Machlus, PhD and Dougald Monroe, PhD

8:30 – 10:30AM SESSION I
New Insights into Basic Coagulation/Biochemistry
Chairs: Gino Arvapally, MD and Alisa S. Walleng, PhD

8:30 – 8:55 A New role of Protein S in blood coagulation
Rinku Majumder, PhD

8:55 – 9:20 Prekallikrein alternative pathway
Helen Philippou, PhD

9:20 – 9:45 The evolutionary adaptation of Snake venom Factor V
Mettee Bos, PhD

9:45 – 10:10 Understanding the mechanisms of ADAMTS13 regulation
Colin Kretz, PhD

10:10 – 10:40 Coffee Break

10:45 – 12:00 PM SESSION II
Transfusion Medicine - Clinical Updates
Chairs: Marnane Hoffman, MD, PhD and Yara Park, MD

10:45 – 11:10 Update on using tranexamic acid to reduce bleeding
Beverly Hunt, MD, OBE

11:10 – 11:35 Immune mechanisms controlling transfusion outcomes
Karina Yasakhlaksh, PhD

11:35 – 12:00 ABO blood group
Professor James O'Donnell

12:00 – 1:15 Lunch

1:15 – 2:55 PM SESSION III
Platelets and Megakaryocytes Beyond Hemostasis
Chairs: Maria Adean, PhD and Kellie Machlus, PhD

1:15 – 1:40 Role of platelet extracellular vesicles and their organelle content in immunity
Eric Bollard, PhD

1:40 – 2:05 Thrombo-inflammation
Professor Jim Crowley

2:05 – 2:30 Role of platelets in infectious disease: Focus on respiratory viruses
Mikko Kauppeneo, PhD

2:30 – 2:55 Lung MKs as Immune Cells
Craig Morrell, DVM, PhD

2:55 – 3:25 Coffee Break

3:25 – 4:55 PM SESSION IV
Hot Topics
Chairs: Robert Lee, PhD and Erica Spankenbaugh, PhD

3:25 – 3:40 Hot Topic #1

3:40 – 3:55 Hot Topic #2

3:55 – 4:10 Hot Topic #3

4:10 – 4:25 Hot Topic #4

4:25 – 4:40 Hot Topic #5

4:40 – 4:55 Hot Topic #6

5:00 – 6:00 Posters and Awards

6:30 – 9:00 BBQ Dinner in the Anne Hill Courtyard

SATURDAY, April 30, 2022
All sessions will be held in the Hill Ballroom

7:00 – 8:00am Continental Breakfast in Chancellor Ballroom

8:00 – 9:15 AM SESSION V
Alternative Animal Models - "Anything but the Mouse"
Chairs: Yohei Hidaka, PhD and Tim Nichols, MD

8:00 – 8:25 Swimming with the fishes
Jordan Shavit, MD, PhD

8:25 – 8:50 Domestic Dog Models
Marjory Brooks, DVM

8:50 – 9:15 Developing a humanized miniature swine model of sickle cell disease
Chris Rogers, PhD

9:15 – 9:40 Coffee Break

9:40 – 10:55 AM SESSION VI
COVID and Thrombo-inflammation
Chairs: Alfred Lee, MD, PhD and Jerrold Levy, MD

9:40 – 10:05 Deciphering the role of platelets and thrombosis in COVID-19
Bench to Bedside at Warp Speed
Jeffrey Berger, MD

10:05 – 10:30 The interface between coagulation, platelets, and inflammation in COVID-19
Robert Campbell, PhD

10:30 – 10:55 A thromboinflammatory link in adipose
Ed Conway MD, PhD

10:55 – 11:20 Coffee Break

11:20 AM – 12:40 PM SESSION VII
Basic Science Approaches to Transfusion Medicine
Chairs: Anirban Sen Gupta, PhD and Philip Spinella, MD

11:20 – 11:45 The endothelium as a mediator of homeostatic recuscitation
Jessica Cardenas, PhD

11:45 – 12:10 Synthetic Platelets
Ashley Brown, PhD

12:10 – 12:35 Neonatal platelet transfusion
Patricia Davenport, MD

12:35 – 1:00 Extracellular vesicles for trauma-related bleeding
Matthew D. Neal, MD, FACS

1:00 – 2:30 Lunch/Adjourn
PROGRAM PLANNERS

Wolfgang Bergmeier, PhD
Professor Biochemistry & Biophysics UNC Blood Research Center UNC, Chapel Hill

Matthew Flick, PhD
Principal of Medicine UNC Blood Research Center UNC, Chapel Hill

Maureen Hoffman, MD, PhD
Professor Pathology & Laboratory Medicine UNC Blood Research Center UNC, Chapel Hill

Nigel Key, MD
Harold R. Roberts Distinguished Professor Department of Pharmacology UNC Blood Research Center UNC, Chapel Hill

Kellie Machlus, PhD
Assistant Professor Harvard Medical School Principal Investigator, Boston Children’s Hospital Vascular Biology Program, Boston, MA

Rafal Pawlinski, PhD
Professor of Medicine UNC Blood Research Center UNC, Chapel Hill

Douglas M. Monroe III, PhD
Professor UNC Blood Research Center UNC, Chapel Hill

Alisa S. Wollberg, PhD
Professor Pathology & Laboratory Medicine UNC Blood Research Center UNC, Chapel Hill

INVITED FACULTY

Maria Alemán, PhD
Assistant Professor Department of Pharmacology UNC Chapel Hill

Gowthami Arepally, MD
Professor of Medicine Duke University Medical Center Durham, NC

Jeffrey Berger, MD, MS, FAHA, FACC
Associate Professor, Medicine and Surgery Director, Center for the Prevention of Cardiovascular Disease New York University School of Medicine

Eric Boillard, PhD
Professor, Department of Microbiology and Immunology Université Laval, Quebec, Canada

Mette H. A. Bos, PhD
Assistant Professor in Thrombosis and Hemostasis Leiden University Medicine Center Leiden, The Netherlands

Marjory Brooks, DVM
Comparative Coagulation Section-Animal Health Diagnostic Center Cornell University, Ithaca, NY

Ashley Brown, PhD
Assistant Professor, Joint Department of Biomedical Engineering UNC Chapel Hill and NC State University

Robert Campbell, PhD
Assistant Professor, Department of Internal Medicine Molecular Medicine Program University of Utah

Jessica Cardenas, PhD
Assistant Professor University of Texas Health Science Center Houston, TX

Ed Conway, Professor
University of British Columbia The Centre for Blood Research Vancouver BC, Canada

James Crawley, Professor
Centre for Haematology Imperial College London

Patricia Davenport, MD
Assistant Professor Attending Neonatologist Boston Children’s Hospital, Boston, MA

Katherine A. High, MD
President, Therapeutics A*Bio, RTP, NC

Yohei Hisada, PhD
Assistant Professor UNC Chapel Hill

Beverley J. Hunt, MD, OBE
Professor of Thrombosis & Haemostasis, KCL Medical Director of Thrombosis, London St. Thomas Hospital, London

Colin Kretz, PhD
Associate Professor, Thrombosis and Atherosclerosis Research Institute (TaARI), McMaster University, Hamilton, Ontario

Milka Keupenova, PhD
Assistant Professor of Medicine University of Massachusetts Chan Medical School, Boston, MA

Alfred Lee, MD, PhD
Associate Professor Yale School of Medicine New Haven, CT

Robert Lee, MD, PhD
Assistant Professor Biostatistics & Biometrics UNC, Chapel Hill

Jerold H. Levy, MD, FAHA, FCCM
Professor of Anesthesiology Professor of Surgery (Cardiothoracic) Duke University Hospital, Durham, NC

Rinku Majumder, PhD
Professor Louisiana State University, New Orleans, LA

Craig Morrell, DVM, PhD
Professor, Department of Medicine University of Rochester, Rochester, NY

Matthew D. Neal, MD, FACS
Associate Professor of Surgery University of Pittsburgh Medical Center Pittsburgh, PA

Tim Nichols MD
Professor of Medicine and Pathology Frances Owen Blood Research Laboratory UNC, Chapel Hill

James O’Donnell, Professor, RCSi University of Medicine & Health Sciences, Dublin, Ireland

Yara Park, MD
Professor, Department of Pathology and Laboratory Medicine, UNCC, Chapel Hill

Helen Philippou, PhD
Professor University of Leeds, UK

Chris Rogers, PhD
CEO/CSO, Precigen Exemplar Sioux Center, IA

Anirban Sen Gupta, PhD
Professor Department of Biomedical Engineering Case Western Reserve University Cleveland, OH

Jordan Shavit, MD, PhD
Professor of Pediatric Hematology/Oncology University of Michigan

Erica Sparkenbaugh, PhD
Assistant Professor UNC Chapel Hill

Philip C. Spinella, MD, FCCM
Professor of Surgery University of Pittsburgh, PA

Karina Tazarbakhsh, PhD
VP and Director of Research Development LFKRI, Head, Laboratory of Complement Biology, New York Blood Center New York, NY

ACCREDITATION

EDUCATIONAL CREDIT

Duke University Health System Department of Clinical Education and Professional Development designates this educational activity for a maximum of 10.25 AMA PRA Category 1 Credit. Physicians should claim only credit commensurate with the extent of their participation in the activity.

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In support of improving patient care, the Duke University Health System Department of Clinical Education and Professional Development is accredited by the American Nurses Credentialing Center (ANCC), the Accreditation Council for Pharmacy Education (ACPE), and the Accreditation Council for Continuing Medical Education (ACCME), to provide continuing education for the healthcare team.

RESOLUTION OF CONFLICTS

OF INTEREST

In accordance with the ACCME Standards for Commercial Support of CME, the Duke University Health System Department of Clinical Education and Professional Development will implement mechanisms, prior to the planning and implementation of this CME activity, to identify and resolve conflicts of interest for all program planners and invited faculty.

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This CME activity is made possible with financial support from:

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Thank you for your support!