

Programme

Sunday 28 September		
15:00 onwards	Hotel accommodation check-in open	Hotel lobby
From	Arrival and registration	Nausica Ballroom area
17:00 – 18:00		(lobby level)
18:30 – 20:30	Welcome drinks and canapé reception	La Veranda Restaurant
	Joint Society welcome by:	
	Martin Guthold (IFRS)	
	Helen Philippou (ISFP)	

Monday 29 September		
07:30 - 08:45	Breakfast	Eptanissa Restaurant
08:00	Poster set up	Nausica Ballroom
From 08:00	Registration open	Nausica Ballroom area
		(lobby level)
Session One	Fibrinogen – Clinical	Kerkyra Ballroom
	Co-chairs: Paul Kim + Richard Fish	
08:45 - 09:00	Welcome and introduction	
	Martin Guthold (IFRS)	
	Helen Philippou (ISFP)	
09:00 - 09:30	State of the art lecture 1	
	Fibrin in neurological diseases: From mechanisms to clinical trials	
	Katerina Akassoglou	
	Gladstone Institutes, University of California San Francisco, USA	
09:30 - 09:50	O-01	
	Plasma and tissue fibrin formation associates with severity of	
	obesity and metabolic liver disease: 2-year follow-up after	
	bariatric surgery	
	Nadja Bødker Pedersen	
	Unit for Thrombosis Research, Department of Clinical Biochemistry,	
	University Hospital of Southern Denmark, Esbjerg, Denmark	

09:50 – 10:10	O-02 Plasma fibrin clot characteristics are affected by feminizing and masculinizing gender-affirming hormone therapy, but in opposite directions Mette Bøgehave Department of Clinical Biochemistry, Esbjerg Hospital, University Hospital of Southern Denmark, Esbjerg, Denmark.	
10:10 - 10:40	Refreshments, exhibition, posters	Nausica Ballroom
	Co-chairs: Marguerite Neerman-Arbez+ Cedric Duval	
10:40 – 11:00	O-03 Association of fibrin clot characteristics with development of ischemic stroke in patients with recently diagnosed type 2 diabetes Else Marie Bladbjerg Unit for Thrombosis Research, Department of Clinical Diagnostics, University Hospital of Southern Denmark, Esbjerg, Denmark	
11:00 – 11:20	O-04 Tissue transglutaminase drives fibrin β-Chain cross-linking: a novel fibrin modification observed in trauma patients Nana Kwame Kwabi Boateng Department of Pathobiology & Diagnostic Investigation, Michigan State University, East Lansing, MI, USA	
11:20 – 11:40	O-05 TRIGs trial: Does Tranexamic acid modulate the immune response in gastrointestinal surgery? Tammy Lam Australian Centre for Blood Diseases, Monash University, Australia	
11:40 - 13:00	Lunch, exhibition, posters	Nausica Ballroom
Session Two	Fibrinogen – Fundamental I	Kerkyra Ballroom
	Co-chairs: Martin Guthold + Leonid Medved	
13:00 – 13:45	IFRS outstanding senior investigator award lecture	
	Fibrinogen and fibrin biomechanics from nanometers to centimeters Rustem I. Litvinov Department of Cell and Developmental Biology, University of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania, USA	
13:45 – 14:05	O-06 Inside Fibrin Clots Red Blood Cell Aggregation Induces Platelet-Independent Clot Contraction John W. Weisel Department of Cell and Developmental Biology, University of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania, USA	
14:05 – 14:30	Flash talks by Best of the Best poster authors P02 Admission D-Dimer Levels Can Help Predict Outcomes in Acute	

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	Ischemic Stroke Patients Treated with Intravenous Thrombolysis Zsuzsa Bagoly	
	Lendület "Momentum" Hemostasis and Stroke Research Group of the Hungarian Academy of Sciences, Debrecen, Hungary	
	P03 Relationship between Fibrin Clot Structure and Fibrinogen and Thrombin Concentrations Stephen Baker Department of Physics, Wake Forest University, Winston-Salem, NC, USA	
	P18 Alterations in pathways of complement and platelet signalling are evident following proteome profiling of plasma from patients with Vaccine Induced Immune Thrombotic Thrombocytopenia (VITT)	
	Charithani B Keragala The Australian Centre for Blood Diseases, Central Clinical School, Monash University, Melbourne, Victoria, Australia	
	P24 Platelet additive solutions containing phosphates and used in blood component therapies alter fibrin clot formation and delay fibrinolytic degradation Gael B Morrow School of Pharmacy, Applied Sciences & Public Health, Robert Gordon University, Aberdeen, UK	
	P27 Comparative Study Reveals Superiority of New Fibrinogen Test Over Clauss Fibrinogen Method in detecting hypofibrinogenemia in liver disease San Pun AiMorphous Health, Basel, Switzerland	
14:30 – 14:50	Refreshments, exhibition, posters	Nausica Ballroom
	Co-chairs: John W. Weisel + Timea Feller	
14:50 – 15:10	O-07 Conformational protein binders to the fibrinogen αC-region increase clot contractability and reduce <i>in-vivo</i> venous thrombosis Julia S. Gauer Discovery and Translational Science Department, Institute of Cardiovascular and Metabolic Medicine, University of Leeds, Leeds, UK	
15:10 – 15:30	O-08 Structural mechanisms of forced unfolding of double-stranded fibrin oligomers Valeri Barsegov Department of Chemistry, University of Massachusetts, Lowell, USA	
15:30 – 15:50	O-09 Multiscale Modeling of the Structure and Dynamics of Soluble Fibrin	

	Georgios Kementzidis Stony Brook University, Department of Applied Mathematics and Statistics, Stony Brook, NY, USA	
15:50 – 16:15	Comfort break	
16:15 – 17:45	Poster networking session	Nausica Ballroom
17:45 onwards	Free time	
From 19:00 –	Informal buffet dinner	Eptanissa Restaurant
20:30		

Tuesday 30 September		
07.20 00.45	Ducalifact	Eptanissa Restaurant
07:30 – 08:45	Breakfast	•
From 08:00	Registration open	Nausica Ballroom area
		(lobby level)
Session Thre	ee Lysis - Clinical	Kerkyra Ballroom
	Co-chairs: Helen Philippou + Claire Whyte	
09:00	Welcome day two	
	Helen Philippou (ISFP)	
09:00 - 09:45	ISFP outstanding investigator award lecture*	
	Beyond Clot Lysis: Unraveling the Dual Role of tPA and its Interaction with NMDA Receptors in the Pathophysiology of Neurological Disorders	
	Denis Vivien	
	Professor of Cell Biology / Hospital practitioner (PU-PH)	
	Caen Normandie University Medical School / Caen Normandie	
	University Hospital, France	
	*Award for outstanding contributions to the field of Fibrinolysis and	
	Proteolysis	
09:45 – 10:05	O-10 Dietary intake of zinc in humans regulates platelet stores and modulates haemostatic function Nicola J Mutch School of Medicine, Medical Sciences and Nutrition, Institute of Medical Sciences, Foresterhill, Aberdeen, UK	
10:05 – 10:25	O-11 Effect of hemostasis polymorphisms on the outcome of acute ischemic stroke thrombolysis treatment Rebeka Hodossy-Takács University of Debrecen; Faculty of Medicine, Department of Laboratory Medicine, Division of Clinical Laboratory Sciences, Debrecen, Hungary	
10:25 – 10:45	Refreshments, exhibition, posters	Nausica Ballroom
	Chair: Robert Ariens	
10:45 – 11:05	O-12 Human plasma kallikrein and urokinase as mediators of crosstalk between kallikrein and plasminogen systems in breast cancer. Guacyara Motta	

	Departamento de Bioquímica and 1Departamento de Biofísica, Escola Paulista de Medicina, UNIFESP, São Paulo, SP, Brasil	
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11:05 – 11:25	O-13 Quantitation of Tranexamic Acid Levels in Plasma Samples from Patients Undergoing Surgery Involving Cardiopulmonary Bypass Using a Novel FRET-based Assay Paul Y. Kim Departments of Medicine and Biochemistry, McMaster University, Hamilton, ON, Canada	
11:25 – 12:40	Lunch, exhibition, posters	Nausica Ballroom
12:00 – 12:30	ISFP Council meeting	Kerkyra Ballroom
12:00 – 12:30	IFRS Council meeting	Paxi-Ithaca Room
Sossion Four	' Lysis – Fundamental	(restaurant level) Kerkyra Ballroom
Jession Four	,	,
12:40 – 13:10	Co-chairs: Rob Medcalf + Brittany Bannish State of the art lecture 2	
12:40 – 13:10	Plasminogen Activation in the Pathogenesis of Obesity and Fatty Liver Disease Matthew J. Flick Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA	
13:10 – 13:30	O-14 Role of plasminogen in acetaminophen-induced acute liver injury Dayita Banerjee Department of Pathobiology & Diagnostic Investigation, Michigan State University, East Lansing, MI, USA	
13:30 – 14:15	Refreshments, exhibition, posters	Nausica Ballroom
	Co-chairs: Krasimir Kolev + Fraser Macrae	
14:15 – 14:35	O-15 Fibrinogen promotes Conversion of tPA into Its More Active Two-Chain Form and Initiation of Fibrinogenolysis: A Comparative Study with TNK Robert L. Medcalf Molecular Neurotrauma & Haemostasis Laboratory, Australian Centre for Blood Diseases, School of Translational Medicine, Monash University, Australia	
14:35 – 14:55	O-16 Fibrinolytic Breakdown of Staphylococcus aureus Fibrin Biofilms Safae Oukrich Department of Medical Microbiology & Infectious Diseases, Erasmus University Medical Center, Rotterdam, The Netherlands	
14:55 – 15:15	O-17 The Halo Fluorescence Fibrinolysis (HoFF) Test Identifies Hypofibrinolytic Phenotypes in Patients with Sepsis Zikou Liu Molecular Neurotrauma & Haemostasis Laboratory, Australian Centre for Blood Diseases, School of Translational Medicine, Monash University, Australia	

15:15	End of day remarks	
15:45 – 18:45	Excursion to Corfu Old Town	Coach departure from hotel
	(contact the congress registration desk to book your place)	lobby area
From 19:00 –	Informal buffet dinner	Eptanissa Restaurant
20:30		

Wednesday 1 October		
07:30 – 08:45	Breakfast	Eptanissa Restaurant
From 08:00		Nausica Ballroom area
From 08:00	Registration opens	(lobby level)
Session Five	Fibrinogen – Fundamental II	Kerkyra Ballroom
	Co-chairs: Matt Flick + Stephen Baker	
09:00	Welcome day three	
	Martin Guthold (IFRS)	
09:00 - 09:30	IFRS outstanding junior investigator award lecture	
	Permanent lengthening of fibrin fibres is present from low strains and only slightly dependent on the αC-region Tímea Feller Leeds Institute of Cardiovascular and Metabolic Medicine, Leeds, UK	
09:30 – 09:50	O-18 A functional study of fibrinogen with extended alpha chains in developmental hemostasis Leonie Konopka Department of Genetic Medicine and Development, Faculty of Medicine, University of Geneva, Switzerland	
09:50 – 10:10	O-19 Relationships between Plasma Clot Structure, Lysis Time, and Fibrinogen and Thrombin Concentrations Martin Guthold Department of Physics, Wake Forest University, Winston-Salem, NC, USA	
10:10 - 10:30	Refreshments, exhibition, posters	Nausica Ballroom
	Co-chairs: Nicola Mutch + Marguerite Buzza	
10:30 – 11:00	State of the art lecture 3 How Does Fibrin Gel? Revisiting Fibrin's Polymerization Mechanisms Nathan E. Hudson Department of Physics, East Carolina University, Greenville, USA	
11:00 – 11:20	O-20 Targeting the fibrinogen αC-region with Affimers to modulate fibrin clot structure and function Helen R. McPherson Discovery and Translational Science Department, Institute of Cardiovascular and Metabolic Medicine, University of Leeds, UK	

11:20 – 11:40	O-21 Self-assembly of fibrinogen blends into nanofibrous composite scaffolds Dorothea Brüggemann Hochschule Bremen - City University of Applied Sciences, Bremen, Germany	
11:40 – 12:00	O-22 The interaction of fibrin with endothelial N-cadherin promotes fibrin-dependent angiogenesis Leonid Medved Center for Vascular and Inflammatory Diseases and Department of Biochemistry and Molecular Biology, University of Maryland School of Medicine, Baltimore, MD, USA	
12:00 - 13:00	Lunch, exhibition, posters	Nausica Ballroom
12:20 – 12:50	ISFP Assembly meeting	Kerkyra Ballroom
12:20 – 12:50	IFRS Council meeting (if needed)	Paxi-Ithaca Room (restaurant level)
Session Six	Fibrinogen & FXIII	Kerkyra Ballroom
	Co-chairs: Ton Lisman + Julia Sandrin Gauer	
13:30 - 13:50 13:30 - 13:50	State of the art lecture 4 Dose-dependent role of fibrin polymerization in early acetaminophen-induced liver injury James P. Luyendyk Department of Pathobiology & Diagnostic Investigation, Michigan State University, East Lansing, USA O-23 Minimum Factor XIII Concentration Required for Haemostasis in a Bleeding Model	
13:50 – 14:10	Verena Schroeder Department for BioMedical Research, University of Bern, Bern, Switzerland O-24 Modeling Human Clot Biology: Impact of Cellular Content on Fibrin Crosslinking Kirk C. Hansen Department of Biochemistry and Molecular Genetics, University of Colorado, USA	
14:10 – 14:30	Refreshments, exhibition, posters	Nausica Ballroom
Session Seve	en Désiré Collen award symposium (ISFP)	Kerkyra Ballroom
	Co-chairs: Roger Lijnen + Gael Morrow	
14:30 – 14:50	DC-01 New MRI Theranostic Agent for Microthrombi in Ischemic Stroke Audrey Picot Normandie Université, UNICAEN, INSERM, PhIND (Physiopathology and Imaging of Neurological Disorders) Institut Blood and Brain @ Caen-Normandie, Cyceron, Caen, France	
14:50 – 15:10	DC-02	

	Internal lysis of contracted clots Rebecca A Risman Rutgers University, Department of Biomedical Engineering, 599 Taylor Road, Piscataway, USA	
15:10 – 15:30	DC-03 FXIIIa and TAFI binding affimers as molecular tools to modulate fibrinolysis Rui-Gang Xu Discovery and Translational Science Department, Leeds Institute of Cardiovascular and Metabolic Medicine, University of Leeds, UK	
15:30 – 15:50	DC-04 Structural and functional determinants of tranexamic acid efficacy in fibrinolysis inhibition Kata Balog Virág Department of Biochemistry and Molecular Biology, Semmelweis University, Budapest, Hungary	
15:50 – 16:10	DC-05 Evidence of a second cleavage site in tissue plasminogen activator leading to enhanced thrombolytic activity Simon Lebatard University of Caen Normandie, Inserm, GIP Cyceron, F-14000 Caen, France	
16:10	End of day remarks	
From 16:10	Free time	
19:00 – 22:00	Conference buffet dinner – BBQ Presentation of Désiré Collen awards (ISFP) Helen Philippou (ISFP) Paul Kim (ISFP) Presentation of IFRS senior and junior investigator awards Martin Guthold (IFRS) Travel awards (IFRS and ISFP)	Poolside

Thursday 2 October			
07:30 - 08:45	Breakfast	Eptanissa Restaurant	
From 08:00	Registration opens	Nausica Ballroom area	
		(lobby level)	
Session Eigh	Session Eight New Techniques & Diagnostics Kerkyra Ballro		
09:00	Welcome day four		
	Martin Guthold (IFRS)		
	Helen Philippou (ISFP)		
	Co-chairs: James Luyendyk + Verena Schroeder		

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09:00 – 09:30	State of the art lecture 5 Enhanced Structural Imaging of Fibrin Networks via Expansion Microscopy Oleg V. Kim Department of Biomedical Engineering and Mechanics, Fralin Biomedical Research Institute, Virginia Tech, Blacksburg, USA	
09:30 – 09:50	O-25 Biosensors for monitoring thrombin and FXIIIa activity as fibrin accumulates on growing whole blood clots under flow. Scott L Diamond Institute for Medicine and Engineering, University of Pennsylvania, Philadelphia, PA, USA	
09:50 – 10:10	O-26 Arterial Shear Rate Determines the Structure and Mechanical Properties of Clots Formed in a Microfluidic Thrombosis Model Hande Eyisoylu Department of Haematology, Erasmus MC, University Medical Center Rotterdam, Rotterdam, The Netherlands	
10:10 - 10:30	Refreshments, exhibition, posters	Nausica Ballroom
	Co-chairs: Denis Vivien + Nathan Hudson	
10:30 – 11:00	State of the art lecture 6	
	Ischaemia duration length increases fibrin film coverage on acute myocardial infarction thrombi Robert A S Ariëns Leeds Institute of Cardiovascular and Metabolic Medicine, University of Leeds, UK	
11:00 – 11:20	O-27 Identifying the Relationship Between Plasma Proteomics, Patient Outcome, and Clot Mechanics Andrew Gosselin Rutgers University Department of Biomedical Engineering, Piscataway, NJ, USA	
11:20 – 11:40	O-28 Inhibiting fibrinolysis reduces migratory capacity of neutrophils through clots Thomas L. C. Palmer-Dench Discovery and Translational Science Department, Institute of Cardiovascular and Metabolic Medicine, University of Leeds, Leeds, UK	
11:40 – 12:00	O-29 Predicting Trauma Mortality with Machine Learning – The Role of Fibrin-Related Biomarkers Hajer Ali Rutgers University Department of Biomedical Engineering, Piscataway, NJ USA	
12:10 – 12:10	Closing remarks	
12:10 - 13:00	Lunch and farewell	Nausica Ballroom
By latest 12:00	Hotel accommodation check-out	

POSTERS

Poster 1

TAFI downregulation prevents fibrinolysis shutdown and improves disease severity in SARS-CoV-2-infected K18-hACF2 mice

Roberto Aiolfi¹, Antonella Zampolli¹, Hiroshi Deguchi¹, Jose A. Fernández¹, Angel Gandarilla¹, Juan Carlos de la Torre², Laurent O. Mosnier¹

¹Department of Translational Medicine and ²Department of Microbiology and Immunology, The Scripps Research Institute, La Jolla, CA, USA

Poster 2 (flash talk)

Admission D-Dimer Levels Can Help Predict Outcomes in Acute Ischemic Stroke Patients Treated with Intravenous Thrombolysis

Balázs Kis^{1,2}, Rita Orbán-Kálmándi^{2,3}, Linda Lóczi^{2,4}, Dóra Bomberák^{2,3}, Rebeka Hodossy-Takács^{2,3}, István Szegedi^{2,5}, Attila Nagy⁶, Zsófia Anna Kádár^{2,3}, Nikolett Vasas¹, Ervin Berényi¹, George Harston⁷, László Csiba^{4,5}, László Oláh⁵, Zsuzsa Bagoly^{2,3}

¹University of Debrecen; Faculty of Medicine, Department of Radiology, Debrecen, Hungary, Kálmán Laki Doctoral School, Egyetem square 1, 4032 Debrecen, Hungary

²Lendület "Momentum" Hemostasis and Stroke Research Group of the Hungarian Academy of Sciences, 1 Egyetem square, 4032 Debrecen, Hungary

³University of Debrecen; Faculty of Medicine, Department of Laboratory Medicine, Division of Clinical Laboratory Sciences, 1 Egyetem square, 4032 Debrecen, Hungary

⁴HUN-REN-DE Cerebrovascular Research Group, 1 Egyetem square, 4032 Debrecen, Hungary

⁵University of Debrecen; Faculty of Medicine, Department of Neurology, 1 Egyetem square, 4032 Debrecen, Hungary ⁶University of Debrecen; Faculty of Health Sciences, Department of Preventive Medicine, 26 Kassai street, 4012 Debrecen, Hungary

Poster 3 (flash talk)

Relationship between Fibrin Clot Structure and Fibrinogen and Thrombin Concentrations

Zezhong Zhang¹, <u>Stephen Baker</u>¹, Keith Bonin¹, Martin Guthold¹

Poster 4

Modeling the effect of tension on fibrinolysis

Brittany Bannish¹, Roukayatou Ouedraogo¹, Austin Segrest¹, Valerie Tutwiler², Nathan E. Hudson³

Poster 5

Investigation of the effect of ethanol on clot lysis in acute ischemic stroke patients and healthy volunteers <u>Dóra Bomberák</u>^{1,2}, Rita-Orbán Kálmándi^{1,2}, Linda Lóczi^{1,2}, Rebeka Hodossy-Takács^{1,2}, Anna Zsófia Kádár¹, Tamás Árokszállási³, István Szegedi^{2,3}, László Csiba³, László Oláh³, Zsuzsa Bagoly^{1,2}

⁷Brainomix Ltd., Seacourt Tower, Botley, Oxford OX2 0JJ, UK

¹ Department of Physics, Wake Forest University, Winston-Salem, NC 27109, USA

¹Department of Mathematics and Statistics, University of Central Oklahoma, Edmond, OK 73034, USA.

²Department of Biomedical Engineering, Rutgers University, Piscataway, NJ 08854, USA.

³Department of Physics, East Carolina University, Greenville, NC 27858, USA.

Poster 6

Establishing Reference Intervals for Fibrin Clot Measures

M. Vakur Bor^{1,2,*}, Nicoline Daugaard ^{1,2}, Anette Larsen ^{1,2}, Else-Marie Bladbjerg ^{1,2}

Poster 7

A novel missense variant (FGG c.875A>C, p.Lys292Thr) in the gamma chain of fibrinogen causing congenital dysfbrinogenemia in a asymptomatic patient with Factor V Leiden mutation

Mustafa Vakur Bor^{1,2,*}, Julie Brogaard Larsen^{3,4}, Inge SøkildePedersen^{5,6}

¹ Department of Clinical Biochemistry, University Hospital of Southern Denmark, Esbjerg, Denmark, ²Unit for Thrombosis Research, Department of Regional Health Research, University of Southern Denmark, Esbjerg, Denmark, ³Thrombosis and Haemostasis Research Unit, Department of Clinical Biochemistry, Aarhus University Hospital, Aarhus, Denmark, ⁴Department of Clinical Medicine, Aarhus University, Aarhus, Denmark, ⁵Department of Clinical Medicine, Aalborg University, Aalborg, Denmark, De

Poster 8

Endothelial membrane-anchored serine protease testisin in the resolution of angiogenesis

Marguerite S. Buzza and Toni M. Antalis

Center for Vascular and Inflammatory Diseases and Department of Pharmacology and Physiology, University of Maryland School of Medicine, 800 West Baltimore Street, Baltimore, MD 21201, USA.

Poster 9

Congenital Fibrinogen Deficiencies: Not So Rare

Alexander Couzens^{1,2}, Marguerite Neerman-Arbez^{1,2}*

Poster 10

Exploring the Functional Role of Tandem Repeats in Fibrin(ogen) αC Region

<u>Caela Flake</u>¹, Helen R. McPherson², Robert A. S. Ariëns², Nathan E. Hudson³, Hope Maultsby¹, Lourdes Lopez¹, Martin Guthold¹

Poster 11

Fibrin(ogen) drives the host thrombotic response in septicemia

Catherine Lapointe, PhD, Woosuk S. Hur, PhD, Kadri Kangro, PhD, Alisa S. Wolberg, PhD and Matthew J. Flick, PhD.

¹University of Debrecen; Faculty of Medicine, Department of Laboratory Medicine, Division of Clinical Laboratory Sciences, 1 Egyetem tér, 4032 Debrecen, Hungary

²Lendület "Momentum" Hemostasis and Stroke Research Group of the Hungarian Academy of Sciences, 1 Egyetem tér, 4032 Debrecen, Hungary

³University of Debrecen; Faculty of Medicine, Department of Neurology, 1 Egyetem tér, 4032 Debrecen, Hungary

¹ Department of Clinical Biochemistry, University Hospital of Southern Denmark, Esbjerg, Denmark, ²Unit for Thrombosis Research, Department of Regional Health Research, University of Southern Denmark, Esbjerg, Denmark

¹ Department of Genetic Medicine and Development, Faculty of Medicine, University of Geneva, Switzerland

² Institute of Genetics and Genomics in Geneva (iGE3), Geneva, Switzerland

¹ Department of Physics, Wake Forest University, 1834 Wake Forest Rd, Winston-Salem, NC 27109, USA

² Discovery and Translational Science Department, Institute of Cardiovascular and Metabolic Medicine, University of Leeds, Leeds, LS2 9LU, UK.

³ Department of Physics, East Carolina University, E 5th St, Greenville, NC 27858

Department of Pathology and Laboratory Medicine, UNC Blood Research Center, UNC School of Medicine, University of North Carolina at Chapel Hill, NC, USA.

Poster 12

CRYOFIBRINIGENEMIA: Molecular insights on the pronounced increase in fibrin solubility in plasma and fibrinogen solutions by albumin

¹Adam Hansen, ²Dennis K. Galanakis, ¹Miriam Rafailovich

Poster 13

Novel transgenic zebrafish to study hemostasis gene regulation during development

<u>Daniel Gil Fraga</u>^{1,2}, Leonie Konopka^{1,2}, Hannah Butterworth^{1,2}, Alexander Couzens^{1,2}, Corinne Di Sanza^{1,2}, Marguerite Neerman-Arbez^{1,2} and Richard J. Fish^{1,2*}.

Poster 14

Characterizing the Impact of Transfusion Products on Blood Clot Failure

<u>Andrew Gosselin</u>¹, Julie Goswami^{2,3}, Valerie Tutwiler¹

- 1- Rutgers University, Department of Biomedical Engineering, 599 Taylor Rd., Piscataway, NJ, USA 08854
- 2- Rutgers Robert Wood Johnson Medical School, Department of Surgery, Division of Acute Care Surgery, 125 Paterson Street, Suite 4100, New Brunswick, NJ, USA 08901
- 3- Rutgers Acute Care Surgery Research Laboratory (RASR), 125 Paterson Street, Suite 4100, New Brunswick, NJ, USA 08901

Poster 15

Importance of Fibrinogen, D-dimers and thrombocytopenia in malaria complicated by *Plasmodium vivax*<u>Miriam Elena Cantero</u>^{1,2}; María Fernanda Yasnot ¹; María Camila Velasco ¹; Yuranis Garcia¹

- 1. Microbiological and Biomedical Research Group of Cordoba, Faculty of Health Sciences, Department of Bacteriology. University of Cordoba, Colombia.
- 2. Microbiological and Biomedical Research Group of Cordoba, Faculty of Basic Sciences, Department of Chemistry. Universidad de Córdoba, Carrera 6 No. 77- 305 Montería Córdoba, Colombia. Postal Code: 230002

Poster 16

Low Density Lipoprotein (LDL) Significantly Alters Fibrin Clot Structural Properties and Lysis Time

Arezoo Nameny¹, Austin Desmet², Richard Pope¹, Ali Daraei¹, Martin Guthold^{1*}

- ¹ Department of Physics, Wake Forest University, Winston-Salem, NC 27109, United States
- ² Department of Biology, Wake Forest University, Winston-Salem, NC 27109, United States

Poster 17

Individual crosslinked fibrin fibers behave differently under cyclic stress-strain manipulation than whole fibrin clots Christine Helms, Nathan Gaid University of Richmond, VA, USA.

Poster 18 (flash talk)

¹Department of Material Science, ²Department of Pathology, Stony Brook University, NY, USA

¹ Department of Genetic Medicine and Development, Faculty of Medicine, University of Geneva, Switzerland

²Institute of Genetics and Genomics in Geneva (iGE3), Geneva, Switzerland

Alterations in pathways of complement and platelet signalling are evident following proteome profiling of plasma from patients with Vaccine Induced Immune Thrombotic Thrombocytopenia (VITT)

<u>Charithani B Keragala</u>^{1,2,3}, Samantha J Emery-Corbin^{4,5}, Sam WZ Olechnowicz^{4,5}, Jumana Yousef^{4,5}, Rory Bowden^{4,5}, Chantal Attard, Laura F Dagley^{4,5}, Robert L Medcalf¹, Paul Monagle^{6,7,8,9}, Sanjeev Chunilal^{2,3}, Huyen Tran^{1,11}, James McFadyen^{1,10,11,12}, Hannah Stevens^{1,10,11}, Heidi Ho¹

- The Australian Centre for Blood Diseases, Central Clinical School, Monash University, Melbourne, Victoria, Australia.
- 2. The School of Clinical Sciences, Monash Health, Monash University, Clayton, Victoria, Australia.
- 3. Department of Haematology, Monash Health, Clayton, Victoria, Australia
- 4. Division of Advanced Technology and Biology Division, Walter and Eliza Hall Institute of Medical Research, Parkville, Victoria, Australia.
- 5. Department of Medical Biology, The University of Melbourne, Parkville, Victoria, Australia.
- 6. Department of paediatrics, University of Melbourne, Melbourne, Victoria, Australia
- 7. Haematology Research, Murdoch Children's Research Institute, Melbourne, Victoria, Australia.
- 8. Clinical Haematology, Royal Children's Hospital, Parkville, Victoria, Australia.
- 9. Kids Cancer Centre, Sydney Children's Hospital, Randwick, New South Wales, Australia.
- 10. Atherothrombosis and Vascular Biology Program, Baker Heart and Diabetes Institute, Melbourne, Victoria, Australia.
- 11. Department of Haematology, Alfred Hospital, Melbourne, Victoria, Australia.
- 12. Baker Department of Cardiometabolic Health, the University of Melbourne, Parkville, Victoria, Australia.

Poster 19

Afibrinogenemias - three cases from our haematological centre

Roman Kotlín¹, Žofie Sovová¹, Marek Havlíček¹, Michael Pasák¹, Jiří Suttnar¹, Eliška Ceznerová¹, Ingrid Hrachovinová², Dana Provazníková², Alžběta Hlaváčková¹

- ¹ Department of Biochemistry, Institute of Hematology and Blood Transfusion, U Nemocnice 2094/1, 128 00 Prague 2, Czech Republic
- ² Laboratory for Disorders in Hemostasis, Institute of Hematology and Blood Transfusion, U Nemocnice 2094/1, 128 00 Prague 2, Czech Republic

Poster 20

Divergent Roles of Phosphate and Chloride Salts in Fibrinogen Nanofiber Self-Assembly

Antoine Eyram Kwame¹, Aparna Sai Malisetty², Lucio Colombi Ciacchi², Susan Köppen², Dorothea Brüggemann¹

Biophysics and Applied Biomaterials, Hochschule Bremen - City University of Applied Sciences, Bremen, Germany

Poster 21

Ionic Shielding of Electrostatic Interactions of Fibrinogen during Aggregate Formation

<u>Aparna Sai Malisetty</u>^{1,a}, Antoine Eyram Kwame², Dorothea Brüggemann², Lucio Colombi Ciacchi¹, Susan Köppen-Hannemann¹

- ¹ Hybrid Materials Interfaces Group, Faculty of Production Engineering, University of Bremen, Bremen, Germany
- ² Biophysics and applied biomaterials, Hochschule Bremen City University of Applied Sciences, School of Electrical Engineering and Computer Science, Bremen, Germany

Poster 22

Changes on the fibrinolytic system after 12 weeks of cessation of combined hormonal contraceptives

Rita Marchi¹, Louis Oliver², Marc Blondon¹, Pierre Fontana¹, Justine Hugo-Rondin³, Alessandro Casini¹

Division of Angiology and Hemostasis, Department of Medicine, University Hospitals of Geneva, University of Geneva, Switzerland. ²Biomedical sciences, University of Geneva, Geneva, 2 Department of medicine, University of Geneva,

² Hybrid Materials Interfaces Group, Faculty of Production Engineering, University of Bremen, Bremen, Germany

Geneva, 3 Angiology and Hemostasis, Geneva University Hospital, Geneva, ³ Service de Gynécologie, Hôpital Paris Saint Joseph et centre Marie -Thérèse, Paris.

Poster 23

Improving investigation and management for bleeding disorders of unknown cause (BDUC)

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Poster 24 (flash talk)

Platelet additive solutions containing phosphates and used in blood component therapies alter fibrin clot formation and delay fibrinolytic degradation

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Poster 25

Going Smaller: Passive Microrheology to Study the Dynamic Microenvironment During Fibrin Formation and Lysis Daniel S. Norris², Karen Hemmings¹, Robert A.S. Ariëns¹, Tímea Feller¹, and Simon D. A. Connell²

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TAFIa-Mediated Inhibition of Fibrinolysis: Insights from a Novel Plasmin Generation Assay

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Poster 27 (flash talk)

Comparative Study Reveals Superiority of New Fibrinogen Test Over Clauss Fibrinogen Method in detecting hypofibrinogenemia in liver disease

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The role of surfaces in non-thrombogenic clot formation: initiation and prevention

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Low-field fast field-cycling NMR relaxometry to determine fibrin clot microstructure

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Poster 30

Automated Computational Analysis of Fibrin Network Morphology in Scanning Electron Microscopy Images of Clots

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Role of Fibrin(ogen) in Regulation of Thrombin Generation

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Poster 32

Direct oral anticoagulants differentially alter susceptibility to fibrinolysis

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Poster 33

Elevated FVIIa-AT is associated with more compact fibrin clot networks and impaired fibrinolysis in patients with acute ischemic stroke: impact on stroke severity

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Higher citrullinated histone H3 is associated with hypofibrinolysis in patients following deep-vein thrombosis who developed postthrombotic syndrome

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