IFRS workshop 2022

Jongny sur Vevey, Switzerland.

Times, presenting authors and titles are shown. For abstracts, full author lists and affiliations please consult the printed program available at the meeting.

Sunday June 12th

17:00 Registration available

19:00 Cocktail reception

Monday June 13th

08:30 Registration available

09:00 **Welcome and Introduction**

Moniek de Maat

Session 1 - Structure biomechanics and polymerization

Chairperson: Moniek de Maat

09:15 State of the Art 1 - John Weisel, University of Pennsylvania

Oral communications

09:45 Ranjini Ramanujam - Fracture mechanics of human blood clots: fibrinogen concentration is a critical determinant of clot toughness

10:05 Valeri Barsegov - Biomechanics, thermodynamics, and mechanisms of rupture of fibrin Clots

10:25 Rustem Litvinov - Contraction of blood clots and thrombosis

10:45 Coffee Break

Session 2 – Fibrinolysis

Chairperson: Robert Ariëns

11:15 State of the Art 2 - Alisa Wolberg, University of North Carolina

Oral communications

11:45 Rebecca Risman - Effects of clot contraction on clot degradation: a mathematical and experimental approach

12:05 Lauren Schmitt - Plasma fibrin clot proteome and FXIII cross-linking analysis reveals differences between fibrinolytic extremes.

12:25 Andrew Gosselin - Hyperfibrinolysis drives instabilities in trauma induced coagulopathy

12:45 Lunch

13:45 Poster session and sponsor booths

14:45 Historical Lecture - Denis Galanakis, Stony Brook University

15:15 Break

Session 3 - Fibrin clot properties I

Chairperson: John Weisel

15:45 State of the Art 3 - Robert Ariëns, University of Leeds

Oral communications

16:15 François Caton - Fibrinogen aggregates dramatically alter fibrin ultrastructure

16:35 Martin Guthold - Automated fiber diameter and porosity measurements of plasma clots in scanning electron microscopy images

16:55 Rita Marchi - Software development to quantify fibrin clot images by laser scanning confocal microscopy (LSCM)

17:15 Poster session and sponsor booths

19:30 Dinner

Tuesday June 14th

08:30 Registration available

Session 4 - Factor XIII

Chairperson: Helen Philippou

09:15 State of the Art 4 - Verena Schroeder, University of Bern

Oral communications

09:45 Cédric Duval - Increased venous thromboembolism in a new mouse model of impaired fibrin α-chain crosslinking

10:05 Muriel Maurer - Exploring contact sites between activated factor XIII and fibrinogen αC (233-425)

10:25 László Muszbek - Activation mechanism dependent surface exposure of cellular factor XIII on activated platelets and platelet microparticles

10:45 Break

Session 5 - Fibrin(ogen)-cell interactions I

Chairperson: Matthew Flick

11:15 State of the Art 5 - Leonid Medved, University of Maryland

Oral communications

11:45 Kirby Lattwein - Ultrasound-activated microbubbles for the treatment of fibrin-based biofilms

12:05 Filomena Carvalho - Studying the molecular interactions of fibrinogen with erythrocytes in Carotid Artery Disease

12:25 Lunch

13:45 Poster session and sponsor booths

15:15 Break

Session 6 - Fibrinogen variants

Chairperson: Richard Fish

15:45 State of the Art 6 - Judith de Vries, Erasmus University Medical Center

Oral communications

16:15 Dre'Von Dobson - Identifying genes that regulate fibrinogen expression

16:35 Julie Hahn - DNA methylation analysis identifies novel genetic loci associated with circulating fibrinogen levels in blood

17:30 Transfer to Vevey

18:15 Boat Cruise

Wednesday June 15th

Session 7 - Fibrinogen disorders

Chairperson: Marlien Pieters

09:15 State of the Art 7 - Marguerite Neerman-Arbez, University of Geneva

09:45 State of the Art 8 - Alessandro Casini, Geneva University Hospitals

Oral communication

10:15 Richard Fish - A zebrafish model of dysfibrinogenemia caused by hotspot mutations in the human fibrinogen gamma chain

10:35 Break

Session 8 - Clinical Management

Chairperson: Anetta Undas

11:15 Sponsored Lecture - Asoke Roy, Basingstoke and North Hampshire Hospital

Oral communications

11:45 Alessandro Casini - Outcomes of pregnancy, delivery and post-partum in women with hereditary fibrinogen disorders: the FibrinoGEST study

12:05 Francesca Casalino - Fibrinogen replacement in hereditary dysfibrinogenemia: how much is enough?

12:25 Kirk Hansen - Characterizing plasma fibrin in trauma patients using advanced proteomic approaches

12:45 Lunch

13:45 Poster session and sponsor booths

15:15 Break

Session 9 - Inflammation and Disease

Chairperson: Alisa Wolberg

15:45 State of the Art 9 - Matthew Flick, University of North Carolina

Oral communications

16:15 Marlien Pieters - Serum lipids, apolipoproteins and Lp(a) associate cross-sectionally with plasma clot properties in Africans – epidemiological evidence

16:35 Miriam Rafailovich - Molecular basis for surface initiated non-thrombogenic clot formation following viral infection

16:55 Marlien Pieters - Association of the metabolic syndrome with changes in fibrinogen concentration and fibrin clot properties over a 10-year period

17:15 Poster session and sponsor booths

19:30 Conference Dinner

Thursday June 16th

Session 10 - Fibrin clot properties II

Chairperson: Martin Guthold

Oral communications

09:30 Lauren Poole - Dysregulated fibrinogen γ-chain cross-linking in FibγΔ5 mice drives acute liver injury after acetaminophen overdose

09:50 Helen McPherson - Inclusion of fibrin with truncations in the αC-region dysregulates clot structure: implications for dysfibrinogenaemia

10:10 Timea Feller - Fibrin fibre resistance to rupture is affected by both α- and γ-chain crosslinks mediated by FXIIIa

10:30 Break

Session 11-12 - Tissue engineering / Fibrinogen and COVID-19

Chairperson: Alessandro Casini

Oral communications

11:15 Stephani Stamboroski - Interaction of cells involved in wound healing with self-assembled fibrinogen nanofibers

11:35 Martin Guthold - Mechanical properties of electrospun, blended fibrinogen: PCL nanofibers

11:55 Judith de Vries - Increased percentage of extended Aα chain fibrinogen (αE) in COVID-19 patients

12:15 Zsuzsa Bagoly - Low factor XIII levels and hyperfibrinolysis in pregnancies with COVID-19

12:35 Closing remarks

12:45 Lunch boxes available