

## SCIENTIFIC PROGRAM – 2022

Venue: “Musée de la Médecine”

Université Libre de Bruxelles (ULB), Campus Erasme  
Lennik Road 808 - Brussels 1070 - Belgium

### Day 1 – Tuesday October 4 – Cardiogenic Shock

Title	Time	Duration	Speaker
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Venue opens	08:30		
Welcome speech and presentation of the meeting	09:00		

<b>1<sup>st</sup> session: Large animal model design</b> (15 min lectures + Q&A during Panel discussion)			
<b>Chairpersons:</b> Dirk Donker, Utrecht, & Guillaume Lebreton, Paris			
• AMI with reperfusion	09:10	15 min	Bart Meyns, Leuven
• AMI-cardiogenic shock without reperfusion	09:25	15 min	Jacob Moller, Odense
• AMI-cardiogenic shock with reperfusion	09:40	15 min	Antoine Herpain, Brussels
• AMI with mechanical circulatory support	09:55	15 min	Navin Kapur, Boston *
• Cardiac arrest ± ECLS	10:10	15 min	Giuseppe Ristagno, Milan
<b>Panel discussion: Consensus on the design of cardiogenic shock and cardiac arrest animal models</b>	10:25	30 min	All speakers + Q&A

COFFEE BREAK (20 min)

<b>2<sup>nd</sup> session: How to assess ...</b> (15 min lectures + Q&A during Panel discussion)			
<b>Chairpersons:</b> Daniel Burkhoff, New York, & Antoine Herpain, Brussels			
• LV systolic and diastolic function using PV loops	11:15	15 min	Daniel Burkhoff, New York *
• LV afterload and ventriculo-arterial coupling using PV loops	11:30	15 min	Manuel M. Garcia, Jerez
• RV ventriculo-arterial coupling using PV loops	11:45	15 min	Mads Dam Lyhne, Aarhus
<b>Panel discussion: Consensus on cardiac function assessment using PV loops in animal models of circulatory failure</b>	12:00	30 min	All speakers + Q&A

<b>3<sup>rd</sup> session: Industry corner</b> (12 min lectures + 3 min Q&A)			
<b>Chairpersons:</b> Mads Dam Lyhne, Aarhus, & Jacob Moller, Odense			
• ADV550® and biventricular PV loop acquisition	12:30	15 min	Astrid Haegens, Transonic
• New Impella® devices	12:45	15 min	Christoph Nix, Abiomed

LUNCH BREAK (60 min)

# Preclinical Research in Acute Cardiac and Critical Care – PRAC<sup>3</sup>

## 4<sup>th</sup> session: How to assess ...

(12 min lectures + 3 min Q&A)

**Chairpersons:** Asger Granfeldt, Aarhus, & Bart Meyns, Leuven

• <b>Non-invasive myocardial oxygen consumption</b>	14:00	15 min	Daniel Burkhoff, New York *
• <b>AMI size using <i>ex vivo</i> MRI or SPECT analysis</b>	14:15	15 min	Antoine Herpain, Brussels
• <b>Mechanical circulatory support-induced hemolysis and coagulation disorders</b>	14:30	15 min	Christophe Vandenbriele, Leuven
• <b>Brain function in cardiac arrest models</b>	14:45	15 min	Filippo Annoni, Brussels
<b>Discussion</b>	15:00	10 min	

COFFEE BREAK (20 min)

## 5<sup>th</sup> session: Latest results from ...

(15 min lectures + 5 min Q&A)

**Chairpersons:** Roberto Lorusso, Maastricht, & Alexandre Mebazaa, Paris

• <b>Odense</b>	15:30	20 min	Jacob Moller, Odense
• <b>Leuven (KUL)</b>	15:50	20 min	Bart Meyns, Leuven
• <b>Boston (Tufts University)</b>	16:10	20 min	Navin Kapur, Boston *
• <b>Brussels (ULB)</b>	16:30	20 min	Alexander Moiroux, Brussels
<b>Discussion</b>	16:50	10 min	
• <b>Aarhus</b>	17:00	20 min	Asger Granfeldt, Aarhus
• <b>Nancy</b>	17:20	20 min	Bruno Levy, Nancy
• <b>Milan (Milan University)</b>	17:40	20 min	Giuseppe Ristagno, Milan

**End of the 1<sup>st</sup> day**

18:00

(\* These lectures are prerecorded, but the speaker will be connected remotely from the USA to participate in the Q&A sessions and join the roundtable discussions.

## Day 2 – Wednesday October 5 – Septic Shock

Title	Time	Duration	Speaker
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### 1<sup>st</sup> session: Animal models

(15 min lectures + Q&A during Panel discussion)

**Chairpersons:** Matthijs Kox, Nijmegen, & Martin Matejovic, Pilsen

<ul style="list-style-type: none"> <li>Minimal Quality Thresholds in Pre-Clinical Sepsis Studies (MQTiPSS): a summary</li> </ul>	08:00	15 min	Marcin Osuchowski, Vienna
<ul style="list-style-type: none"> <li>Rodent models</li> </ul>	08:15	15 min	Sebastien Preau, Lille
<ul style="list-style-type: none"> <li>Large animal models</li> </ul>	08:30	15 min	Peter Radermacher, Ulm
<ul style="list-style-type: none"> <li>Pig model of peritonitis-induced septic shock</li> </ul>	08:45	15 min	Milan Stengl, Pilsen
<ul style="list-style-type: none"> <li>Septic cardiomyopathy</li> </ul>	09:00	15 min	Alex Dyson, London
<b>Panel discussion: How can we further improve animal models of septic shock?</b>	09:15	20 min	All speakers + Q&A

COFFEE BREAK (20 min)

### State-of-the-art lecture

(25 min lecture + 5 min Q&A)

<ul style="list-style-type: none"> <li>Advanced echocardiographic tools to monitor LV systolic and diastolic functions in acute animal models</li> </ul>	09:55	30 min	Jan D'hooge, Leuven
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### 2<sup>nd</sup> session: How to assess ...

(15 min lectures + Q&A during Panel discussion)

**Chairpersons:** Bruno Garcia, Brussels, & Sebastien Preau, Lille

<ul style="list-style-type: none"> <li>Renin-angiotensin system and circulating levels of catecholamines and vasopressin</li> </ul>	10:25	15 min	Adrien Picod, Paris
<ul style="list-style-type: none"> <li>Vasopressor receptor down-regulation</li> </ul>	10:40	15 min	Francisco Vasques-Novoa, Porto
<ul style="list-style-type: none"> <li>Vascular tone using pulse wave analysis</li> </ul>	10:55	15 min	Manuel M. Garcia, Jerez
<ul style="list-style-type: none"> <li>Autonomous nervous system dysfunction and dysautonomia</li> </ul>	11:11	15 min	Marta Carrara and Manuela Ferrario, Milan
<b>Panel discussion: Optimal assessment of vascular function in animal models</b>	11:25	20 min	All speakers + Q&A

LUNCH BREAK (60 min)

# Preclinical Research in Acute Cardiac and Critical Care – PRAC<sup>3</sup>

## 3<sup>rd</sup> session: How to assess ...

(12 min lectures + 3 min Q&A)

**Chairpersons:** Filippo Annoni, Brussels, & Raphael Favory, Lille

• <b>Energetic substrate shifts</b>	12:45	15 min	Jolien Vandewalle, Ghent
• <b>Mitochondrial disorders</b>	13:00	15 min	Alex Dyson, London
• <b>Systemic inflammation</b>	13:15	15 min	Matthijs Kox, Nijmegen

## 4<sup>th</sup> session: New perspectives

(12 min lectures + 3 min Q&A)

**Chairpersons:** Antoine Herpain, Brussels, & Alexandre Mebazaa, Paris

• <b>Ultrafast echo-imaging for myocardial stiffness and coronary microcirculation assessment</b>	13:30	15 min	Mathieu Pernot, Paris
• <b>New paradigms and treatments for renin-angiotensin system disturbances in circulatory failure</b>	13:45	15 min	Karine Bourgeois, Berlin

COFFEE BREAK (20 min)

## 5<sup>th</sup> session: Latest results from ...

(15 min lectures + 5 min Q&A)

**Chairpersons:** Peter Radermacher, Ulm, & Fabio S Taccone, Brussels

• <b>Lille</b>	14:20	20 min	Raphael Favory and Sebastien Preau, Lille
• <b>London (KCL)</b>	14:40	20 min	Alex Dyson, London
• <b>Pilsen</b>	15:00	20 min	Martin Matejovic and Milan Stengl, Pilsen
<b>Discussion</b>	15:20	10 min	
• <b>Nijmegen</b>	15:30	20 min	Matthijs Kox, Nijmegen
• <b>Paris (Lariboisière)</b>	15:50	20 min	Feriel Azibani, Paris
• <b>Brussels (ULB)</b>	16:10	30 min	Bruno Garcia, Antoine Herpain, Fuhong Su, Brussels

**Closing remarks**

16:40

**End of the meeting**

16:45