

TECNO SEPSIS





2nd INTERNATIONAL MEETING ON INNOVATION & SEPSIS



Son Liàtzer University Hospital Palma de Mallorca, Spain 





Dear All:

In November 2021, in Mallorca, the first TECNOSEPSIS symposium was held with a very successful attendance and the participation of an extraordinary panel of experts. Being in great part affected by the pandemic, the successful meeting was received with utmost enthusiasm by the scientific community. This year conference, TECNOSEPSIS II is welcoming you to an even more exciting content and format.

COVID pandemic has certainly modified and limited our lives while teaching us several lessons and introducing a new way of life. New approaches to healthcare are the motive to media attention and topic for discussion in many forums. With no hesitation the world is embracing the advantages that technology has to offer. The search for advanced systems aimed to enhance our healthcare systems to provide better outcomes and to create an environment of safety is undoubtedly in full development.

Technology has undeniable benefits in all fields of medicine. In the recent years, we have attended to a technological convergence in medicine. What has been coined as digital transformation encompasses several areas such as the nanoparticles, cells, computers and cognitive (neural) networks.

Sepsis is one of the fields of medicine in which technology has more impact. Thanks in part to the technological advances the last two decades have witnessed a significant decrease in the morbidity and mortality chronology and any advances in the care of patients must all happen for the care of the patients and less importantly for administrations and health systems.

TECNOSEPSIS II is opening forums and discussions about artificial intelligence applied to sepsis, advanced diagnostic tools, biomarkers, aspects related to nanotechnology for both diagnostic and treatment purposes. Following the success of the first edition,

TECNOSEPSIS II brings us a more dynamic meeting yet. With an even broader worldwide recognized panel of experts, the format of the conference is filled with exciting presentations, dynamic round tables moderated and attended by the most prestigious experts in technology applied to medicine. In addition, we have also prepared audience interaction and participation throughout the entire meeting.

TECNOSEPSIS II is presented to you in-person and in virtual format allowing us to reach out to different areas of the world and making of this meeting an international venue fully dedicated to the innovation in sepsis and medicine. We invite you to be part of this exciting forum and to collaborate hand to hand in this historical moment we are living.

Looking forward to seeing you at TECNOSEPSIS II.





FOUNDERS

Dr. Marcio Borges. Coordinator of Multidisciplinary Sepssis Unit, ICU Department. Associated Professor of Infectious Diseases of the Balearic Island University. Son Llatzer University Hospital, Palma de Mallorca. Main investigator of Sepsis Group of the IDISBA. Director of Sepsis Code of Spain. Director of Sepsis Group of FEPIMCTI. Sepsis Code Foundation President (Spain).

Jorge Luis Hidalgo-Marroquín. Professor of Critical Care and Head of the Critical Care Division at Karl Heusner Memorial Hospital (Belice).

Dr. Néstor A. Raimondi. Intensive Therapy Director - Juan Fernandez Hospital of Buenos Aires (Argentina) Outgoing President Pan American and Iberian Federation of Critical Medicine and Intensive Therapy (FEPIMCTI)

Dr. Javier Pérez Fernández. Medical Director Critical Care Services - Baptist Hospital of Miami (USA)

Dr. Roberto de la Rica. Technology Coordinator of the multidisciplinary Sepsis Group IDISBA (Spain)

Dr. Joseph Nates. Deputy Chair Critical Care Department, ICU Medical Director – MD Anderson Cancer Center of Houston (USA). Founding President at Oncologic Critical Care Research Network (ONCCC-R-NET)

LOCAL COMMITTEE

Dr. Sara Franco. ICU Service Son Llátzer University Hospital (Spain)

Dr. María Aranda. Multidisciplinary Sepsis Unit. ICU Service Son Llátzer University Hospital (Spain)

Dr. Rafael Zaragoza. Head of Intensive Care Service. Dr Peset Universitary Hospital. Coordinator of Transplants of Valencia Community (Spain)

Dr. Antonia Socias. Multidisciplinary Sepsis Unit. ICU Service Son Llátzer University Hospital (Spain)

Dr. María Ortega. ICU Service Son Llátzer University Hospital (Spain)

Dr. Yasmina Nieto. ICU Service Son Llátzer University Hospital (Spain)

Dr. Francisco Mari Mari. Sont Llátzer University Hospital Manager (Spain)

Dr. Alberto del Castillo. Multidisciplinary Sepsis Unit. ICU Service Son Llátzer University Hospital (Spain)

Dr. Joana Mena. Multidisciplinary Sepsis Unit. ICU (Spain)





SCIENTIFIC COMMITTEE

Dr. Adel Alsisi. Chief Medical Office Prime Healthcare Group - Chair of Intensive Care Department Prime Hospital at Prime Healthcare DUBAI (ARAB EMIRATES)

Dr. Craig M. Coopersmith. Professor of Surgery. Emory University School of Medicine Atlanta, GA (USA)

Dr. Ricard Ferrer. Intensive Medicine Services Director, Vall d'Hebron Hospital of Barcelona (Spain).

Dr. Laura Lechuga. Full Professor of the Spanish National Research Council (CSIC) and Head of the Nanobiosensors and Bioanalytical Applications Group at the Catalan Institute of Nanoscience and Nanotechnology (ICN2) in Barcelona (Spain).

Dr. Ignacio Martín-Loeches. Professor of Intensive care Medicine in Trinity College Dublin (Ireland)

Dr. Alfredo Matos. HEAD OF ICU Surgery Complex Hospital University CSS of Panamá. President of the Panamanian Association of Medicine Critical and Intensive Therapy (APMCTI). Presidente Elect FEPIMCTI (Panamá)

Dr. Paulo Mergulhao. ICU coordinator at Hospital Lusíadas Porto. President of the Portuguese Society of Intensive Care Medicine (Portugal)

Dr. Kristy Murray. Professor of Pediatrics and Molecular Virology and Microbiology. Vice Chair for Research, Department of Pediatrics. Assistant Dean, National School of Tropical Medicine. Director, Center for Human Immunobiology. Baylor College of Medicine and Texas Children's Hospital Houston, TX (USA)

Dr. Arzu Topeli. Internal Medicine Intensive Care Hacettepe University Ankara (Turkey)

Dr. Gee Young Suh. Pulmonary and Critical Care. Samsung Hospital (Korea)







OPENING 08:15-08:30h

Organizing Committee and authorities

08:30-09:00h **OPENING CONFERENCE**

OCTOBER, 5TH

Nanotechnology: the real revolution in Medicine and Sepsis?

Presenter: Dr. Marcio Borges (Spain) Speaker: Dr. Sonia Antoraz Contera (UK)

09:00-10:15h SECTION I: Diagnosis in Sepsis I: Microbiology Perspective

Moderators

Dr. Climent Casals Pascual (Spain) Dr. Geraldine Morazan (Belice)

Panelists

Dr. Kristy Murray (USA) Dr. Jordi Vila (Spain) Dr Llanos Salar (Spain)

COFFEE BREAK 10:15-10:45h

10:45-12:00h SECTION II: Diagnosis in Sepsis II: Biomarkers Perspective

Moderators

Dr. Roberto de la Rica (Spain) Dr. Gee Young Suh (South Korea)

Panelists (10 minutes each) Dr. Jesús Bermejo (Spain) Dr. Pilar Marco (Spain) Dr. Djanalli Ananne (France)

DISCUSSION ()



TECNO20 2nd INTERNATIONAL MEETING SEPSIS 22 ON INNOVATION & SEPSIS





OCTOBER, 5TH

12:00-13:15h **SECTION III: Nanodiagnostics in Sepsis**

Moderators

Dr. Geraldine Morazan (Belice)

Dr. Pilar Marco (Spain)

Panelists (10 minutes each) Dr. Laura Lechuga (Spain)

Dr. Roberto de la Rica (Spain)

Dr. Sonia Antoraz Contera (ÚK)

DISCUSSION (S)

SECTION IV: Expert View (or Expert's quick overview?): How to improve the 13:15-14:00h

diagnosis of sepsis today and tomorrow?

Moderators

Dr. Paulo Mergulhao (Portugal) Dr. Jesús Bermejo (Spain)

Panelists (10 minutes each)

Biomarkers: Dr. Ignacio Martin-Loeches (Ireland) Microbiological Tests: Dr. Kristy Murray (USA) Clinical approach: Dr. Adel Asisi (Arab Emirates)

DISCUSSION ()

14:00-15:00h

LUNCH

15:00-16:15h

SECTION V: Microbioma

Moderators

Dr. Robert Bucki (Poland) Dr. Jordi Vila (Spain)

Panelists (10 minutes each) Dr. Craig Coopersmith (USA) Dr. Climent Casals-Pascual (Spain)

Dr. Alfredo Matos (Panamá)

DISCUSSION ()

16:15-17:15h

SYMPOSIUM I: Innovative approaches to sepsis management

Moderators: Dr. Gerardo Aquilar (Spain)

Panelists

Dr. Ricard Ferrer (Spain) Dr. Álex Soriano (Spain)

With the collaboration of **Pfizer**



2nd INTERNATIONAL **MEETING** ON INNOVATION 4 SEPSIS

5-7 October



OCTOBER, 6TH

08:15-09:00h Tecnosepsis: Euroasia Perspectives

Moderators

Dr. Ahsina Jahan Lopa (Bangladesh)

Dr. Adel Asisi (Arab Émirates)

Panelists

Dr. Rajesh Chandra Mishra (India)

Dr. Sharmili Sinha (India) Dr. Ricard Ferrer (Spain)

09:00-9:30h KEYNOTE SESSION: Artificial Intelligence (AI) in Sepsis:

Perspectives now and in the future

Presenter

Dr. Nestor Raimondi (Argentina)

Speaker Dr. Niklas Lidströmer (Sweden)

09:30-10:15h **SECTION VI: Phenotypes in Sepsis**

Moderators

Dr. Paulo Mergulhao (Portugal)

Dr. Joseph Nates (USA)

Panelists (10 minutes each) Dr. Mervyn Singer (UK) Dr Ignacio Martin-Loeches (Ireland)

Dr. Dianalli Ananne (France)

DISCUSSION (\$\ightarrow\$)

10:15-11:15h SYMPOSIUM II: Fast ID/AST to improve Sepsis Management

Part 1: bioFire pneumonia panel value in managing pneumonia in the ICU

Dr Julien Textoris, Vice President Medical Affairs in bioMérieux EME

Part 2: Specific REVEAL: FAST AST to improve Blood Stream Infection

managemen

Prof. Martin Rottman, INSERM U1173, Université de Versailles St Quentin, France. bioMerieux, Specific Diagnostics, San Jose CA, USA.

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11:15-11:30h **COFFEE BREAK** [

11:30-12:45h SECTION VII: Artificial Intelligence for sepsis detection

Moderators

Dr. Rafael Zaragoza (Spain) Dr. Daniel de Backer (Belgium)

Panelists (10 minutes each) Dr. Lucas Fleuren (Netherlands) Dr. Niklas Lidströmer (Sweden) Dr. Marcio Borges (Spain)

DISCUSSION



TECNO 20 2nd INTERNATIONAL MEETING ON INNOVATION & SEPSIS 22 & SEPSIS



5-7 October

OCTOBER, 6TH

12:45-14:00h SECTION VIII: Artificial Intelligence for sepsis management

Moderators

Dr. Niklas Lidströmer (Sweden) Dr. Néstor Raimondi (Argentina)

Panelists (10 minutes each)
Dr. Javier Pérez (USA)
Dr. Mervyn Singer (UK)

Dr Lucas Fleuren (Netherlands)

DISCUSSION ()

14:00-14:30h LUNCH

14:00-14:30h ROUND TABLE: (Live transmission Asia and recording)

Moderators

Dr. Javier Pérez (USA)

Dr. Jorge Hidalgo Marroquin (Belice)

Panelists

Dr. Ahsina Jahan Lopa (Bangladesh) Dr. Gee Young Suh (South Korea) Dr. Rajesh Chandra Mishra (India)

Dr. Arzu Topeli (Turkey)

14:30-15:45h SECTION IX: New Therapeutics Perspectives in Sepsis

Moderators

Dr. Mervyn Singer (UK)
Dr. Craig Coopersmith (USA)

Panelists (10 minutes each)
Dr. Ricard Ferrer (Spain)
Dr. Djillali Ananne (France)
Dr. Ince Can (Netherlands)

DISCUSSION: 45 MINUTES

15:45-16:45h SYMPOSIUM III: Are there limits to innovating in sepsis management?

Dr. Rafael Zaragoza Crespo (Spain) Dr. Carolina García Vidal (Spain) Dr. Rafael León López (Spain)

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TECNO 200 2nd INTERNATIONAL MEETING SEPSIS 22 & SEPSIS



5-7 October

OCTOBER, 7TH

09:00-09:30h **KEYNOTE SESSION:** Personalize Sepsis Management, is it possible?

Presenter

Dr. Jorge Hidalgo Marroquin (Belice)

Speaker

Dr. Craig Coopersmith (USA)

09:30-10:15h SECTION X: New Therapeutics Perspectives in Sepsis II

Moderators

Dr. Daniel de Backer (Belgium)

Dr. Arzu Topeli (Turkey)

Panelists (10 minutes each)

Dr. Robert Bucki (Poland) Dr. Adel Asisi (Arab Emirates)

Dr. Peter Pickkers (Netherlands)

DISCUSSION (P)

10:15-11:15h SYMPOSIUM IV: Nutritional Therapy in Sepsis

Consequences of the malnutrition in Sepsis

Dr. Victor Sánchez (Mexico)

Nutritional Assessment

María Alejandra Bartoli (Panama)

Enteral nutritional therapy

Dr. Alfredo Matos (Panama)

Parenteral nutritional therapy

Dr. Carolina Méndez (Colombia)

DISCUSSION ((**)



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11:15-11:45h

COFFEE BREAK







OCTOBER, 7TH

11:45-13:00h **BRAINSTORMING I: Diagnosis**

Moderators

Dr. Laura Lechuga (Spain)

Dr. Lucas Fleuren (Netherlands)

Panelists (10 minutes each)

Dr. Kristy Murray (USA)

Dr. Sonia Contera (UK)

Dr. Joseph Nates (USA)

DISCUSSION (...)

13:00-14:15h **BRAINSTORMING II: Management**

Moderators

Dr. Gee Young Suh (South Korea)

Dr. Joseph Nates (USA)

Panelists (10 minutes each)

Dr. Craig Coopersmith (USA)

Dr. Daniel de Backer (Belgium)

Dr Rafael Zaragoza (Spain)

MAIN CONCLUSIONS 14:15-14:45h

Moderators

Dr. Marcio Borges (Spain)

Dr. Néstor Raimondi (Argentina)

Panelists (10 minutes each)

Dr. Javier Pérez (USA)

Dr. Paulo Mergulhao (Portugal)

Dr. Jorge Hidalgo Marroquin (Belice)

Dr. Roberto de la Rica (Spain)

CLOSURE





PANEL OF EXPERTS

Dr. Adel Alsisi. Chief Medical Prime Healthcare Group - Chair of Intensive Care Department Prime Hospital at Prime Healthcare, DUBAI (Arab Emirates)

Dr. Djillali Annane. Head of Réanimation de l'Hôpital Raymond-Poincaré de Garches Hauts-de-seine (France)

Dr. Sonia Antoranz Contera. Professor of Biological Physics . Associate Head of the Department of Physics (Equality, Diversity and Inclusion) University of Oxford (UK)

Dr. Jesús Bermejo, Head of the Biomedical Research Group on Respiratory Infection and Sepsis at ISBAL (Spain)

Dr. Marcio Borges. Coordinator of Multidisciplinary Sepssis Unit, ICU Department. Associated Professor of Infectious Diseases of the Balearic Island University. Son Llatzer University Hospital, Palma de Mallorca. Main investigator of Sepsis Group of the IDISBA. Director of Sepsis Code of Spain. Director of Sepsis Group of FEPIMCTI. Sepsis Code Foundation President (Spain).

Dr. Robert Bucki. Head of the Department of Medical Microbiology and Nanobiomedical Engineering, Faculty of Medicine, Medical University of Bialystok (Poland)

Dr. Ince Can. Intensive Care Department of the Erasmus Medical Center in Rotterdam, Head of Department of Translational Physiology at the Academic Medical Center (AMC) of the University of Amsterdam (The Netherlands)

Dr. Climent Casals-Pascual. Consultant in Medical MIcrobiology and Head of Bacteriology at the Hospital Clinic de Barcelona (Spain)

Dr. Craig M. Coopersmith. Professor of Surgery. Emory University School of Medicine Atlanta, GA (USA)

Dr. Roberto de la Rica. Technology Coordinator of the multidisciplinary Sepsis Group IDISBA (Spain)

Dr. Ricard Ferrer. Intensive Medicine Services Director, Vall d'Hebron Hospital of Barcelona (Spain).

Dr. Lucas M. Fleuren. Intensive Care Adults Amsterdam UMC. Amsterdam (The Netherlands)

Dr. Jorge Luis Hidalgo-Marroquín. Professor of Critical Care and Head of the Critical Care Division at Karl Heusner Memorial Hospital (Belice).

Dr. Ahsina Jahan Lopa. Consultant and Incharge of ICU at MH Samorita Hospital and Medical College, Dhaka (Bangladesh)





PANEL OF EXPERTS

Dr. Laura Lechuga. Full Professor of the Spanish National Research Council (CSIC) and Head of the Nanobiosensors and Bioanalytical Applications Group at the Catalan Institute of Nanoscience and Nanotechnology (ICN2) in Barcelona (Spain).

Dr. Niklas Lidstromer. Postgraduate Researcher in Al in Medicine (Karolinska Institutet) Editor-in-Chief for Al in Medicine and Al in COVID-19 (MRW, Springer Nature) Chief Medical Officer Acorai (Stockholm)

Dr. M^a **Pilar Marco**. Head of the Nb4D Research Group Coordinator of the Nanomedicine Program of the CIBER-BBN Coordinator of the Diagnostic Strategic Initiative of the PTI+ Salud Global (Spain)

Dr. Ignacio Martín-Loeches. Professor of Intensive care Medicine in Trinity College Dublin (Ireland)

Dr. Alfredo Matos. HEAD OF ICU Surgery Complex Hospital University CSS of Panamá. President of the Panamanian Association of Medicine Critical and Intensive Therapy (APMCTI). Presidente Elect FEPIMCTI (Panamá)

Dr. Paulo Mergulhao. ICU coordinator at Hospital Lusíadas Porto. President of the Portuguese Society of Intensive Care Medicine (Portugal)

Dr. Rajesh Chandra Mishra. Honorary Consultant Intensivist & Internist. Shaibya comprehensive care clinic Ahmedabad. Khyati multispeciality hospital Ahmedabad. President-ISCCM. Chancellor-ICCCM. National Representative India- ESICM (INDIA)

Dr. Gerhaldine Morazán. Baylor College of Medicine, Houston Texas as the AFI (Acute Febrile Illnesses study) Medical Surveillance officer, Belize

Dr. Kristy Murray. Professor of Pediatrics and Molecular Virology and Microbiology. Vice Chair for Research, Department of Pediatrics. Assistant Dean, National School of Tropical Medicine. Director, Center for Human Immunobiology. Baylor College of Medicine and Texas Children's Hospital Houston, TX (USA)

Dr. Joseph Nates. Deputy Chair Critical Care Department, ICU Medical Director – MD Anderson Cancer Center of Houston (USA). Founding President at Oncologic Critical Care Research Network, ONCCC-R-NET. (USA)

Dr. Antonio Oliver. Head of the Microbiology Department, Hospital Son Espases, Health research institute of the Balearic Islands (IdISBa), Palma (Spain)

Dr. Javier Pérez Fernández. Medical Director Critical Care Services - Baptist Hospital of Miami (USA)





PANEL OF EXPERTS

Dr. Peter Pickkers. Professor of Experimental Intensive Care Medicine at Radboud University Nijmegen Medical Centre (The Netherlands)

Dr. Néstor A. Raimondi. Intensive Therapy Director - Juan Fernandez Hospital of Buenos Aires (Argentina) Outgoing President Pan American and Iberian Federation of Critical Medicine and Intensive Therapy (FEPIMCTI)

Dr. Llanos Salar. Clinical Microbiologist. University Hospital Fundación Jiménez Díaz of Madrid (Spain)

Dr. Sharmili Sinha. Senior Consultant-Critical Care Medicine. Apollo hospitals, Bhubaneswar. EC Member-Indian Society Of Critical Care Medicine, Mumbai.

Joint Editor. Critical Care Communications (India)

Dr. Mervyn Singer. Professor of Intensive Care Medicine, Director of Centre for Intensive Care Medicine Division of Medicine, University College London (UK)

Dr. Arzu Topeli. Internal Medicine Intensive Care Hacettepe University Ankara (Turkey)

Dr. Jordi Vila. Head of the Department of Clinical Microbiology, Hospital Clinic of Barcelona, Barcelona (Spain)

Dr. Gee Young Suh. President, Korean Society of Critical Care Medicine. Council Member of World Federation of Intensive and Critical Care. Professor of Medicine, Sungkyunkwan University School of Medicine. Center for Intensive Care Department of Critical Care Medicine. Division of Pulmonary and Critical Care Medicine, Department of Medicine Samsung Medical Center (Korea)

Dr. Rafael Zaragoza. Head of Intensive Care Service. Dr Peset Universitary Hospital. Coordinator of Transplants of Valencia Community (Spain)





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