### 3D MEDICAL PRINTING

30 January – 2 February

### BIG DATA

31 January – 1 February

### HEALTHCARE BUSINESS FORUM - REGULATION AND LICENSING

1 February

### WORKFORCE EMPOWERMENT

1 February

### LEADERS IN HEALTHCARE

2 February
Dear Healthcare Professional,

I would like to welcome you to the 2017 edition of Arab Health Congress taking place from 30 January – 2 February at the Dubai International Convention Centre.

We are pleased to announce a dedicated brochure for the business and leadership conferences taking place at Arab Health Congress 2017.

New additions to the non-clinical line up will be the Workforce Empowerment conference and the Healthcare Business Forum - Regulation and Licensing as well as four days’ worth of content for the 3D Medical Printing conference, after it’s hugely successful launch in 2016. The ever-popular Big Data conference will be returning and now in its 5th year, will feature even more speakers and case studies than before.

Lastly we have the flagship conference, Leaders in Healthcare, with a theme of healthcare automation and innovation in technologies which will bring together esteemed speakers, VIPs and official dignitaries on 2 February.

In addition to the above, the congress will also feature 9 CME conferences, (CME credits provided by Cleveland Clinic) bringing together locally and internationally acclaimed speakers to discuss, showcase and share their experiences and insights into the latest methods, developments and technologies in the healthcare industry.

Register today to take advantage of the early bird rates as well as securing your space as places are limited! You can contact the registration team on +971 4 336 7334 or email ahcongress@informa.com.

Alternatively, complete the online registration form at: www.ahcongress.com.

We look forward to welcoming you to Arab Health Congress 2017.

Kindest Regards,

Sally Thompson
Head of Production – Arab Health Congress

### CONFERENCES AT A GLANCE

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Jan-17</td>
<td>31-Jan-17</td>
<td>01-Feb-17</td>
<td>02-Feb-17</td>
</tr>
<tr>
<td>Total Radiology 2017 – The 17th Imaging and Diagnostics Conference</td>
<td>16th Middle East Surgery Conference</td>
<td>3D Medical Printing</td>
<td>13th Middle East Orthopaedics Conference</td>
</tr>
<tr>
<td>8th Middle East Quality Management Conference</td>
<td>10th Middle East Paediatrics Conference</td>
<td>Workforce Empowerment</td>
<td>Leaders in Healthcare</td>
</tr>
<tr>
<td>Emergency Medicine Conference (2 day conference + 1 day workshop)</td>
<td>Oncology Conference</td>
<td>Healthcare Business Forum: Regulation and Licensing</td>
<td>9th Middle East Gastroenterology Conference</td>
</tr>
<tr>
<td>Big Data</td>
<td></td>
<td>Non-CME</td>
<td></td>
</tr>
</tbody>
</table>
3D MEDICAL PRINTING CONFERENCE

30 January – 2 February 2017

30 January 2017

DAY ONE

Fast Forward 2030

10:00 Opening remarks
Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

SESSION ONE: KEYNOTE ADDRESSES
10:10 3D Bioprinting: printing parts for bodies
Prof Gordon Wallace, Australian Laureate Fellow, ANFF Materials Node, ARC Centre of Excellence for Electro-materials Science, Intelligent Polymer Research Institute, University of Wollongong, Wollongong, Australia

10:50 3D print modeling for structural heart interventions: At the crossroads of imaging and innovation
Dr Stephen Little, Cardiologist, Director, Methodist DeBakey Heart & Vascular Center Valve Institute, The Methodist Hospital, Houston, Texas, USA

11:30 Coffee break

SESSION TWO: THE TECHNOLOGY OF THE FUTURE, TODAY
Moderator: Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

12:00 Introduction to 3D medical printing and its applications
Mohamed Elawad, Founder, Medativ, Dubai, UAE

12:30 3D printing in healthcare
Dr Nizar Zein, Chairman, Global Patient Services, Mikati Foundation Endowed Chair and Chief of Hepatology, Cleveland Clinic, Cleveland, Ohio, USA

13:00 Lunch break

SESSION THREE: EMERGING AND FUTURISTIC APPLICATIONS
Moderator: Dr Nizar Zein, Chairman, Global Patient Services, Mikati Foundation Endowed Chair and Chief of Hepatology, Cleveland Clinic, Cleveland, Ohio, USA

14:00 3D printing applications in head and neck reconstruction
Dr Muhanad Hatamleh, Clinical Scientist, Reconstructive Science, King’s College Hospital, London, UK

14:30 3D printing application in cardiovascular surgery
Dr Narutoshi Hibino, Assistant Professor of Surgery, Johns Hopkins Medicine, Baltimore, Maryland, USA

15:00 3D printing and precision medicine
Dr Peter Kim, Transplant and Hepato-biliary Surgeon, Children’s National, Washington DC, USA

15:30 Interactive panel discussion: emerging and futuristic applications
Moderator: Dr Stephen Little, Cardiologist, Director, Methodist DeBakey Heart & Vascular Center Valve Institute, The Methodist Hospital, Houston, Texas, USA
Panellists:
- Dr Narutoshi Hibino, Assistant Professor of Surgery, Johns Hopkins Medicine, Baltimore, Maryland, USA
- Dr Peter Kim, Transplant and Hepato-biliary Surgeon, Children’s National, Washington DC, USA
- Prof Gordon Wallace, Australian Laureate Fellow, ANFF Materials Node, ARC Centre of Excellence for Electro-materials Science, Intelligent Polymer Research Institute, University of Wollongong, Wollongong, Australia
- Dr Nizar Zein, Chairman, Global Patient Services, Mikati Foundation Endowed Chair and Chief of Hepatology, Cleveland Clinic, Cleveland, Ohio, USA

16:30 Networking coffee and 3D printing zone visit

17:30 End of day one

WHATS NEW?
» Live demonstrations: craniotomy and cardiac surgery
» Introduction to 3D medical printing for managers
» Biomedical engineering scientific papers
» Interactive round table discussions

KEY TOPICS:
» Surgery simulations
» Clinical applications – customised implants and prostheses
» Emerging and futuristic applications
» Biomedical engineering scientific papers
» Regulatory and business round table discussions

BENEFITS OF ATTENDING:
» Determine the regulatory considerations in using 3D printing applications
» Review how the development of vascular grafts will impact patient outcomes
» Assess retrospective studies of 3D printing across multiple sub-specialties
» Evaluate the successful application of additive manufacturing in biomedical engineering
» Examine how to build a successful healthcare business model using 3D printing

KEY TOPICS:
>> Surgery simulations
>> Clinical applications – customised implants and prostheses
>> Emerging and futuristic applications
>> Biomedical engineering scientific papers
>> Regulatory and business round table discussions

BENEFITS OF ATTENDING:
>> Determine the regulatory considerations in using 3D printing applications
>> Review how the development of vascular grafts will impact patient outcomes
>> Assess retrospective studies of 3D printing across multiple sub-specialties
>> Evaluate the successful application of additive manufacturing in biomedical engineering
>> Examine how to build a successful healthcare business model using 3D printing

WHATS NEW?
» Live demonstrations: craniotomy and cardiac surgery
» Introduction to 3D medical printing for managers
» Biomedical engineering scientific papers
» Interactive round table discussions

KEY TOPICS:
» Surgery simulations
» Clinical applications – customised implants and prostheses
» Emerging and futuristic applications
» Biomedical engineering scientific papers
» Regulatory and business round table discussions

BENEFITS OF ATTENDING:
» Determine the regulatory considerations in using 3D printing applications
» Review how the development of vascular grafts will impact patient outcomes
» Assess retrospective studies of 3D printing across multiple sub-specialties
» Evaluate the successful application of additive manufacturing in biomedical engineering
» Examine how to build a successful healthcare business model using 3D printing

WHATS NEW?
» Live demonstrations: craniotomy and cardiac surgery
» Introduction to 3D medical printing for managers
» Biomedical engineering scientific papers
» Interactive round table discussions

KEY TOPICS:
» Surgery simulations
» Clinical applications – customised implants and prostheses
» Emerging and futuristic applications
» Biomedical engineering scientific papers
» Regulatory and business round table discussions

BENEFITS OF ATTENDING:
» Determine the regulatory considerations in using 3D printing applications
» Review how the development of vascular grafts will impact patient outcomes
» Assess retrospective studies of 3D printing across multiple sub-specialties
» Evaluate the successful application of additive manufacturing in biomedical engineering
» Examine how to build a successful healthcare business model using 3D printing
DAY TWO

10:00 Opening remarks
Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

SESSION FOUR: SURGERY SIMULATIONS
Moderator: Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

10:05 Demonstration: practice craniotomy on 3D printed model
Dr Chris Parks, Consultant Paediatric Neurosurgeon, Alder Hey Hospital, Liverpool, UK

11:05 Coffee break

11:35 Heart surgery on a 3D printed heart whilst wearing virtual reality glasses
Dr Rafael Guerrero, Director Heart Unit, Chief of Congenital Cardiac Surgery, Alder Hey Children’s Hospital, Liverpool, UK

12:35 Lunch break

SESSION FIVE: CLINICAL APPLICATIONS
Moderator: Dr Saqer Al Mulla, Deputy CEO and Head of Plastic Surgery, Al Qasimi Hospital, Sharjah, UAE

13:40 Tissue printing and replacements
Dr Peter Kim, Transplant and Hepato-biliary Surgeon, Children's National, Washington DC, USA

14:10 Case report: hepatology
Dr Nizar Zein, Chairman, Global Patient Services, Mikati Foundation Endowed Chair and Chief of Hepatology, Cleveland Clinic, Cleveland, Ohio, USA

14:40 Coffee break

15:10 3D preoperative planning and patient specific instrumentation for Arthroplasty surgery
Dr Joseph Iannotti, Maynard Madden Professor, Chair, Orthopaedic and Rheumatologic Institute, Cleveland Clinic, Cleveland, Ohio, USA

15:40 Case report: 3D Printing in congenital heart disease
Dr Fahad Al Habshan, Head of Pediatric Cardiology, King Abdulaziz Cardiac Center, Riyadh, KSA

16:10 3D modeling in craniofacial surgery
Prof Tarek Elbanoby, Associate Professor of Plastic Surgery, Alazhar University, Cairo, Egypt

16:40 End of day two

DAY THREE

09:50 Opening remarks
Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

SESSION SIX: CLINICAL APPLICATIONS II
Moderator: Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

10:00 The role of 3D imaging and MDCT in the preoperative planning of percutaneous screw fixation of lateral compression type 2 (LCII) injuries: case series, preoperative, intraoperative and postoperative correlation
Dr Amanda Isaac, Consultant Musculoskeletal Radiologist, Guy’s and St Thomas’ Hospitals NHS Foundation Trust, Honorary Senior Clinical Lecturer, Kings College, London, UK

10:30 The future of pharmaceutical 3D printing and their impacts on the precision medicine
Dr Shaban Khaled, Research Fellow, Pharmaceutical 3D printing Uo& GSK, School of Pharmacy, University of Nottingham, Nottingham, UK

11:00 Coffee break

SESSION SEVEN: BIOMEDICAL ENGINEERING SCIENTIFIC PAPERS
Moderator: Prof Dr Tim McGloughlin, Chair, Biomedical Engineering, Khalifa University, Abu Dhabi, UAE

11:30 The role of computer simulations in predicting the outcome of 3D bioprinting
Prof Adrian Neagu, Professor, Biophysics, Romania University of Medicine and Pharmacy, Timisoara, Romania

12:00 Biomannufacturing for regenerative medicine
Prof Paulo Jorge Bartolo, Chair in Advanced Manufacturing, School of Mechanical, Aerospace and Civil Engineering, The University of Manchester, Manchester, UK

12:30 Tissue-engineered Extracellular Matrices (ECMs) as adjuvant scaffolds for Endovascular Aneurysm Repair (EVAR)
Prof Dr Tim McGloughlin, Chair, Biomedical Engineering, Khalifa University, Abu Dhabi, UAE

13:00 Lunch break

14:00 Graduate level biomedical engineering education in the MENA region
Dr Hasan Awad Moh’d Al Nashash, Assistant Professor, Institute of Materials Science and Technology, Vienna University of Technology (TU Wien), Vienna, Austria

14:30 Tissue spheroids engaged into rigid microscaffolds: the third strategy in tissue engineering
Prof Dr Aleksandri Ovsianikov, Assistant Professor, Institute of Materials Science and Technology, Vienna University of Technology (TU Wien), Vienna, Austria

15:00 Human MSC/fibrin clot/3D deposited scaffold constructs as advanced ossicular chain replacements
Prof Cesare Stefanini, Assistant Professor, Department of Biomedical Engineering, Khalifa University, Abu Dhabi, UAE

15:30 Coffee break

16:00 Interactive discussion: Challenges in regenerative medicine
Moderator: Dr Tim McGloughlin, Chair, Biomedical Engineering, Khalifa University, Abu Dhabi, UAE

Panellists:
- Prof Adrian Neagu, Professor, Biophysics, Romania University of Medicine and Pharmacy, Timisoara, Romania
- Prof Dr Aleksandri Ovsianikov, Assistant Professor, Institute of Materials Science and Technology, Vienna University of Technology (TU Wien), Vienna, Austria
- Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

17:00 End of day three
SESSION EIGHT: REGULATORY AND BUSINESS Round Table Discussions

The audience splits into two groups to engage in dialogue on the topics outlined below, giving and receiving targeted feedback, engaging in in-depth discussions, and meeting colleagues with similar interests. The moderator will summarise findings at the end of the discussion.

11:10 Round table one: patents and copyrights
Moderator: Haris Zaheer Bajwa, Attorney at Law, Bajwa IP Law Firm, New York, USA

11:10 Round table two: regulatory considerations in using 3D printing applications
Moderator: David Amor, Principal, Medgineering, Minneapolis, Minnesota, USA

13:30 Lunch break

SESSION NINE: ADDITIVE MANUFACTURING

The audience splits into three groups to engage in dialogue on the topics outlined below, giving and receiving targeted feedback, engaging in in-depth discussions, and meeting colleagues with similar interests. The moderator will summarise findings at the end of the discussion.

14:30 Round table one: set-up of tissue engineering research facility
Moderator: Prof Cesare Stefanini, Assistant Professor, Department of Biomedical Engineering, Khalifa University, Abu Dhabi, UAE

14:30 Round table two: biomanufacturing process analysis
Moderator: Prof Paulo Jorge Bartolo, Chair in Advanced Manufacturing, School of Mechanical, Aerospace and Civil Engineering, The University of Manchester, Manchester, UK

14:30 Round table three: additive manufacturing technologies
Moderator: Prof Dr Aleksandr Ovsianikov, Assistant Professor, Institute of Materials Science and Technology, Vienna University of Technology (TU Wien), Vienna, Austria

16:00 Close of conference

ACTIVITY DIRECTOR:
Dr Nizar Zein, Chairman, Global Patient Services, Mikati Foundation
Endowed Chair and Chief of Hepatology, Cleveland Clinic, Cleveland, Ohio, USA

CONFERENCE CHAIR:
Dr Laszlo Kiraly, Division Chief, Medical Affairs, Sheikh Khalifa Medical City, Abu Dhabi, UAE

COMMITTEE MEMBERS:
Dr Prof. Alpaslan Senkoylu, Professor of Orthopaedics and Traumatology, Gazi University, Ankara, Turkey
Dr Faiz Y. Bhora, Chief of Thoracic Surgery, Co-Director Airway Center, Director of Robotic Thoracic Surgery, Director of Thoracic Surgical Oncology, Director of Thoracic Surgery Research, Associate Program Director General Surgery, Mount Sinai West and Mount Sinai St. Lukes, New York, USA
Dr Homero Rivas, Innovative Surgery Director, Medicine School, Stanford University, California, USA
Dr Jamal Jomah, MD, FRCS, FRCSed, ABHRS, FACS, Triple Board (USA, Canada, UK), Consultant Plastic Surgeon, Medart & Ajmal, Riyadh, KSA
Prof Dr Tim McGloughlin, Chair, Biomedical Engineering, Khalifa University, Abu Dhabi, UAE
Dr Vladimir Mironov, Chief Scientific Officer, 3D Bioprinting Solutions, Moscow, Russia

SPEAKER FACULTY:
Prof Adrian Neagu, Professor, Biophysics, Romania University of Medicine and Pharmacy, Timisoara, Romania
Prof Dr Aleksandr Ovsianikov, Assistant Professor, Institute of Materials Science and Technology, Vienna University of Technology (TU Wien), Vienna, Austria
Dr Amanda Isaac, Consultant Musculoskeletal Radiologist, Guy’s and St Thomas Hospitals NIHR Foundation Trust, Honorary Senior Clinical Lecturer, Kings College, London, UK
Prof Cesare Stefanini, Assistant Professor, Department of Biomedical Engineering, Khalifa University, Abu Dhabi, UAE
Dr Chris Parks, Consultant Paediatric Neurosurgeon, Alder Hey Hospital, Liverpool, UK
David Amor, Principal, Medgineering, Minneapolis, Minnesota, USA
Dr Fahad Al Habshan, Head of Pediatric Cardiology, King Abdulaziz Cardiac Center, Riyadh, KSA
Prof Gordon Wallace, Australian Laureate Fellow, ANFF Materials Node, ARC Centre of Excellence for Electro-materials Science, Intelligent Polymer Research Institute, University of Wollongong, Wollongong, Australia
Haris Zaheer Bajwa, Attorney at Law, Bajwa IP Law Firm, New York, USA
Dr Hasan Awad Mohd Al Nashash, Professor, Electrical and Biomedical Engineering, American University of Sharjah, Sharjah, UAE
Dr Joseph Iannotti, Maynard Madden Professor, Chair, Orthopaedic and Rheumatologic Institute, Cleveland Clinic, Cleveland, Ohio, USA
Mohamed Elawad, Founder, Medativ, Dubai, UAE
Dr Muhanad Hatamleh, Clinical Scientist, Reconstructive Science, King’s College Hospital, London, UK
Dr Narutoshi Hibino, Assistant Professor of Surgery, Johns Hopkins Medicine, Maryland, USA
Prof Paulo Jorge Bartolo, Chair in Advanced Manufacturing, School of Mechanical, Aerospace and Civil Engineering, The University of Manchester, Manchester, UK
Dr Peter Kim, Transplant and Hepato-biliary Surgeon, Children’s National, Washington DC, USA
Dr Rafael Guerrero, Director Heart Unit, Chief of Congenital Cardiac Surgery, Alder Hey Children’s Hospital, Liverpool, UK
Dr Saqer Al Mulla, Deputy CEO and Head of Plastic Surgery, Al Qasimi Hospital, Sharjah, UAE
Dr Shaban Khaleed, Research Fellow, Pharmaceutical 3D printing UoG, GSK, School of Pharmacy, University of Nottingham, Nottingham, UK
Dr Stephen Little, Cardiologist, Director, Methodist DeBakey Heart & Vascular Center Valve Institute, The Methodist Hospital, Houston, Texas, USA
Prof Tarek Elbanoby, Associate Professor of Plastic Surgery, Alazhar University, Cairo, Egypt
Dr Tim McGloughlin, Chair, Biomedical Engineering, Khalifa University, Abu Dhabi, UAE
### CONFERENCE PRICES

<table>
<thead>
<tr>
<th>Events</th>
<th>Book and pay before 8 December 2016</th>
<th>Book and pay before 24 January 2017</th>
<th>Onsite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AED</td>
<td>USD</td>
<td>AED</td>
</tr>
<tr>
<td>3D Medical Printing 4 Days</td>
<td></td>
<td>Free to attend *</td>
<td></td>
</tr>
<tr>
<td>Big Data 2 Days</td>
<td>1200</td>
<td>327</td>
<td>1380</td>
</tr>
<tr>
<td>Healthcare Business Forum 1 Day</td>
<td></td>
<td>Free to attend *</td>
<td></td>
</tr>
<tr>
<td>Workforce Empowerment 1 Day</td>
<td>950</td>
<td>259</td>
<td>1125</td>
</tr>
<tr>
<td>Leaders in Healthcare 1 Day</td>
<td>1650</td>
<td>449</td>
<td>1850</td>
</tr>
</tbody>
</table>

### BOOK TODAY

TEL: +971 (0) 4 336 7334  
EMAIL: ahcongress@informa.com  
WEB: www.ahcongress.com

### PAYMENT DETAILS:

- Payments can be made by either Credit Card or Electronic bank transfer.
- A confirmation letter and invoice will be sent to upon receipt of your registration.
- Please note that full payment must be received prior to the event. Only those delegates whose fees have been paid in full will be admitted to the event.

* All registrations will be vetted and are subject to approval from Arab Health Congress. Those accepted delegates will be notified with a successful confirmation email and unique registration number, allowing them access into the 3D Medical Printing Conference or Healthcare Business Forum - Regulation and Licensing.

---

**MEDLAB New Dates**

The world’s largest laboratory management and diagnostics exhibition is now independent of Arab Health, taking place from **6 - 9 February 2017**, as a stand-alone event. Join 30,000 laboratory professionals and 700+ leading exhibitors from 38 countries, showcasing 400+ of the latest laboratory innovations.

www.medlabme.com