MAIL US TO KNOW AVAILABLE SPEAKER SLOTS?

Email: secretary@biomedicalmeetings.com

Contact:
Bijay Patro
Conference Secretary, BEIS-2020
for the Scientific Committee
USG United Scientific Group (A non-profit organization)
8105 Rasor Blvd, ST.112, PLANO, TX 75024

Tel: +1 469-854-2280/81
Web: https://biomedical.unitedscientificgroup.org/
Twitter: @beis2020
United Scientific Group- A non-profit scientific organization would like to welcome all biomedical professionals to the 2nd Biomedical Engineering and Instrumentation Summit (BEIS-2020) at Boston, MA during July 20-22, 2020.

The program planned to provide three days of productive discussion on diagnostic Service, health monitoring devices, image processing, sensor technology and wearable health devices, radiography, biomaterials, novel drug delivery system, etc. These are the key topics that are going to be addressed at the conference. Big data networking, research, and application in biomedical health care also going to discuss at the conference.

**Important Dates**

- **Abstract Submission Deadline:** March 17, 2020
- **Mid-Term Registration Deadline:** March 31, 2020

**Organizing Committee**

- **Tempel F. Smith**
  Boston University, MA

- **Baowei Fei**
  The University of Texas at Dallas and UT Southwestern Medical Center, TX

- **Lucia M. Vaina**
  Boston University, MA

- **Xiaojun Yu**
  Stevens Institute of Technology, NJ

- **Pai-Yen Chen**
  University of Illinois, IL

- **Kenji Suzuki**
  Illinois Institute of Technology, IL

**BEIS-2020 Scientific Sessions**

- Biomaterials & Tissue Engineering
- Sensors and Wearable Systems
- Signal and Image Processing
- Neural Engineering
- Nanobioengineering
- Biomechanics
- 3D Bioprinting
- Biomedical Computation and Modelling
- Biomedical Informatics
- Biomedical Imaging and Instrumentation
- Orthopaedic and Rehabilitation Engineering
- Device Technologies and Biomedical Robotics

**Special Issue: Bioengineering - Selected Papers from BEIS-2020 (2nd Biomedical Engineering & Instrumentation Summit)**

**Guest Editors:**

- Prof. Anthony Guiseppi-Elie
- Prof. Gordana Vunjak-Novakovic
- Prof. Thomas J. Webster
Keynote Speakers

09:00-13:00

**Gordana Vunjak-Novakovic**  
The Mikati Foundation Professor of Biomedical Engineering and Medicine, Columbia University, NY

**Thomas J. Webster**  
Chair and Professor of Chemical Engineering, Northeastern University, Boston, MA

**Anthony Guiseppi-Elie**  
Professor, Department of Biomedical Engineering and TEES Professor, Houston Methodist Research Institute and Texas A&M University, TX

**Elazer R. Edelman**  
Director, Institute for Medical Engineering and Science, Massachusetts Institute of Technology, MA

**Temple F. Smith**  
Professor Emeritus, Department of Biomedical Engineering, Boston University, MA

**Zahi A. Fayad**  
Director Biomedical Engineering And Imaging Institute, Professor, Icahn School of Medicine at Mount Sinai, NY

13:00-13:45  
Lunch Break

13:45-16:15

**Chris Xu**  
Professor, Applied and Engineering Physics, Cornell University, Mong Family Foundation Director of Cornell Neurotech – Engineering, Director of Cornell NeuroNex Hub, NY

**Stephen D Miller**  
Judy Gugenheim Research Professor of Microbiology-Immunology, Northwestern University, IL

**Irene Georgakoudi**  
Professor, Optical Diagnostics for Diseased and Engineered Tissues, Tufts University, MA

**Edward J. Ciaccio**  
Professor, Department of Medicine Columbia University, NY

**Zhongping Chen**  
Professor, Biomedical Engineering, University of California, CA
08:30-13:15  Session-1

Transcriptional Regulation of Arterial Venous Differentiation and its Role in Vascular Tissue Engineering and Vascular Diseases
Guohao Dai
Bioengineering, Northeastern University, MA

Engineered Models to Study the Role of Innervation in Cancer
Madeleine Oudin
Department of Biomedical Engineering, Tufts University, MA

Resorbable Scaffolds of Polybutylene Succinate for Soft Tissue Repair and Support
David Martin
Tepha Inc., MA

Efficacy of Engineered Skin Grafts Prevascularized with Skin-Specific and Non-Specific Endothelial Cells
Hasan Erbil Abaci
Columbia University Medical Center, NY

RylarTM a Biodegradable Polymer for Congenital Heart Disease
Tre Welch
Division of Pediatric Cardiothoracic Surgery, The University of Texas Southwestern Medical Center, TX

Biologically Selective Drug-Eluting Stent
Mehmet Hamdi Kural
Yale University, CT

The Intersection of Consumer Healthcare and Biotech
Ted Chan
Caredash, MA

Tissue Oxygen Concentration Sensing from the Bench to the Bedside
Conor Evans
Wellman Center for Photomedicine, Harvard Medical School, MA

Optomechanical Sensing in Wearables and Medical Textiles
Mathias Kolle
Massachusetts Institute of Technology, MA

Advanced Bio-integrated Sensing Platforms
Ahyeon Koh
Department of Biomedical Engineering, The State University of New York (SUNY)/ Binghamton University, NY

Magnetic Gene Delivery: Rotational Motion of Nanoparticles Triggers RNA Release Under Magnetic Fields
Hiroshi Matsui
Bionanotechnology, Hunter College/Weill Cornell Medical College, NY

Bioinspired Synthetic Nanobiomaterials for Immunotherapy
Evan A Scott
Department of Biomedical Engineering, Northwestern University, IL

Cellular Mechanotransduction at the Level of Organelles
Elizabeth Bartolak-Suki
Department of Biomedical Engineering, Boston University, MA
## Session-2 | Young Researchers Forum

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-17:00</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:00-17:00</td>
<td>Session-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microvasculature on Chip for Cancer Models</td>
<td>Zhengpeng Wan (Jason)</td>
<td>Massachusetts Institutes of Technology, MA</td>
</tr>
<tr>
<td></td>
<td>Circadian Control of Organoid Physiology</td>
<td>Juan R. Alvarez-Dominguez</td>
<td>Department of Stem Cell and Regenerative Biology, Harvard Stem Cell Institute, Harvard University, MA</td>
</tr>
<tr>
<td></td>
<td>Organs-On-Chips: Next Generation Platforms for Toxicological Studies of Engineered Nanomaterials</td>
<td>Herdeline Ann M Ardona</td>
<td>Wyss Institute for Biologically Inspired Engineering, Harvard University, MA</td>
</tr>
<tr>
<td></td>
<td>Inertial Sensing for Transfemoral Amputee Gait Detection</td>
<td>Elissa D Ledoux</td>
<td>Department of Engineering Technology, Middle Tennessee State University, TN</td>
</tr>
<tr>
<td></td>
<td>Injectable Microscale Optoelectronically Transduced Electrodes (MOTEs)</td>
<td>Sunwoo Lee</td>
<td>Electrical and Computer Engineering Cornell University, NY</td>
</tr>
<tr>
<td></td>
<td>A steerable Intubation Catheter Integrated with MEMS-based Sensors for Chronic Airway Management</td>
<td>Alekya B</td>
<td>Indian Institute of Science, India</td>
</tr>
<tr>
<td></td>
<td>Quantitative Determination of Formylglycinamide Ribonucleotide (FGAR) Following Glutamine Antagonist Anti-cancer Therapy: A Marker for Inhibition of Purine Synthesis</td>
<td>Vijayabhaskar Veeravalli</td>
<td>Johns Hopkins University, MD</td>
</tr>
<tr>
<td></td>
<td>UHPLC-QqQ-MS/MS Method Development and Validation with Statistical Analysis: Determination of Raspberry Ketone Metabolites in Mice Plasma and Brain</td>
<td>Bo Yuan</td>
<td>Rutgers University, NJ</td>
</tr>
<tr>
<td></td>
<td>Simulating Neuroplasticity of an Isometric Movement Task Using a Corticospinal Computational Model</td>
<td>Namrata Kadambi</td>
<td>University at Buffalo, NY</td>
</tr>
<tr>
<td></td>
<td>Endogenous Fluorescent Biomarkers Originate in Lipid Droplets of Adipose Tissues</td>
<td>Yang Zhang</td>
<td>Tufts University, MA</td>
</tr>
<tr>
<td></td>
<td>Label-Free Optical Detection of Circulating Tumor Cell Clusters Using Back Scattered Flow Cytometry</td>
<td>Nilay Vora</td>
<td>Tufts University, MA</td>
</tr>
<tr>
<td>17:00-18:00</td>
<td>Poster Session &amp; Networking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
09:00-13:30  Session-3

**Protein Therapeutic Manufacturing at the Point of Care**
Leah Tolosa  
Center for Advanced Sensor Technology, University of Maryland Baltimore County, MD

**Boundary Element Fast Multipole Method for Modeling Neurostimulation of the Brain**
Sergey N Makarov  
Massachusetts General Hospital, MA

**Novel Cytotoxicity and Broad-Spectrum Genotoxicity Platforms**
Bevin P. Engelward  
Massachusetts Institute of Technology, MA

**Real-time Optical Monitoring of Endotracheal Tube Displacement**
Bing Yu  
Department of Biomedical Engineering, Marquette University, WI

**Spatial Bioengineering of Single Cells for Visually Encoded Precision Medicine**
Ahmet F Coskun  
Wallace H. Coulter Department of Biomedical Engineering, Georgia Institute of Technology and Emory University, GA

**Systems and strategies for 3D intravascular ultrasound imaging of blood flow velocity fields using ultrasound**
Brooks Lindsey  
Coulter Department of Biomedical Engineering, Georgia Institute of Technology and Emory University, GA

**Nanomeshing Adds Multifunctionality to Conventional Neuroelectrodes**
Hui Fang  
Department of Bioengineering, Northeastern University, MA

**Understanding the Causes and Effects of Temporal Pitch Distortion in Cochlear Implant Users**
Barry Jacobson  
Massachusetts Institute of Technology, MA

**Cerebrospinal Fluid Interaction with Cerebral Cortex during Pediatric Abusive Head Trauma**
Milan Toma  
College of Osteopathic Medicine, New York Institute of Technology, NY

**Computational prediction of drug-eluting stent performance in patient-specific arteries - a virtual reality**
Farhad Rikhtegar Nezami  
Harvard-MIT Biomedical Engineering Center, Massachusetts Institutes of Technology, MA

**Biomedical and Healthcare Data as a Service: A FHIR Approach**
Rishi Saripalle  
School of Information Technology, Illinois State University, IL

**TBA**
Bryan Bryson  
Massachusetts Institute of Technology, MA

13:30-      Lunch & Departure

* This is a tentative program, subject to change at any time without notification
We wish to see you at BEIS-2020, Boston

Email: secretary@biomedicalmeetings.com

Contact:
Bijay Patro
Conference Secretary, BEIS-2020
for the Scientific Committee
USG United Scientific Group (A non-profit organization)
8105 Rasor Blvd, ST.112, PLANO, TX 75024

Tel: +1 469-854-2280/81
Web: https://biomedical.unitedscientificgroup.org/
Twitter: @beis2020

MAIL US TO KNOW AVAILABLE SPEAKER SLOTS?

Email: secretary@biomedicalmeetings.com

Contact:
Bijay Patro
Conference Secretary, BEIS-2020
for the Scientific Committee
USG United Scientific Group (A non-profit organization)
8105 Rasor Blvd, ST.112, PLANO, TX 75024

Tel: +1 469-854-2280/81
Web: https://biomedical.unitedscientificgroup.org/
Twitter: @beis2020