

# FINAL-PROGRAMME

International Conference on

# BIOMED-2024

Biomedical Engineering and Biotechnology


August 19-21, 2024 | Webiner



 [biomed2024@xpertsmeetings.org](mailto:biomed2024@xpertsmeetings.org)

 +91 8341 464854

 <https://xpertsmeetings.org/biomed24/>

 #3rd Floor, Shanthala Nagar,  
Bengaluru, 560001

# DAY -1 AUGUST 19, 2024

**Time Zone: Beijing, Asia (GMT+8)**

09:00-09:30	<b>Opening Ceremony</b>	
<b>Plenary &amp; Keynote Session</b>		
<b>Conference Chair: Zhang Michael, USA</b>		
09:30-10:10	P	<b>Title: Human Nanomedicine: Real Clinical Results with Nanomaterials and Future Directions with Magnetic Materials</b> Thomas Webster, Hebei University of Technology, China
10:10-10:45	K	<b>Title: Attempts to Decode Genome Information using the LLM Techniques</b> Kenta Nakai, University of Tokyo, Japan
10:45-11:20	K	<b>Title: Potential Emergence of Memory in Somatic Tissues through Collective Computation in Cell Communities</b> Sandhya Samarasinghe, Lincoln University, New Zealand
11:20-11:55	K	<b>Title: TBA</b> Mergen Ghayesh, The University of Adelaide, Australia
<b>Invited Session</b>		
11:55-12:25	I	<b>Title: Engineering Bioactive Synthetic Polymers for Biomedical Applications</b> Phuong Pham, University of New South Wales, Australia
12:25-12:55	I	<b>Title: Biological Activities and Analysis of Active Compounds from Marine-Derived Microorganisms</b> Byeoung-Kyu Choi, Dongyang Mirae University, South Korea
12:55-13:25	I	<b>Title: The Novel Photoreception Mechanism of Channelrhodopsins: Toward Advancements in Optogenetics and Vision Restoration Therapies</b> Tatsuki Tanaka, University of Tokyo, Japan
13:25-13:55	I	<b>Title: TBA</b> Osamu Nureki, University of Tokyo, Japan
13:55-14:25	I	<b>Title: TBA</b> Hidetaka Oshima, University of Tokyo, Japan
14:25-14:55	I	<b>Title: Establishment of a Platform for the Development of Novel xCT Inhibitors</b> Ryosuke Zaitzu, University of Tokyo, Japan
14:55-15:25	I	<b>Title: Structural Basis for Modulation and Stabilization of the Ion Channel Complexes by Auxiliary Subunits</b> Yoshiaki Kise, University of Tokyo, Japan
15:25-15:55	I	<b>Title: TBA</b> Fumiya Sano, University of Tokyo, Japan
15:55-16:25	I	<b>Title: TBA</b> Ikko Nureki, University of Tokyo, Japan
16:25-16:55	I	<b>Title: TBA</b> Aika Iwama, University of Tokyo, Japan
16:55-17:25	I	<b>Title: TBA</b> Giuditta Franco, University of Verona, Italy
17:25-17:55	I	<b>Title: Metallic Implant Surface Modification by Bioactive Hydroxyapatite</b> Yessie Widya Sari, IPB University, Indonesia
17:55-18:25	I	<b>Title: Soft Magnetic Composites for Medical Applications</b> Yunsong Shi, Huazhong University of Science and Technology, China
18:25-18:55	I	<b>Title: Algorithms for Proteoform Identification and Quantification</b> Lusheng Wang, City University of Hong Kong, Hong Kong
18:55-19:25	I	<b>Title: Design and Pharmacological Elucidation of Novel Anti-Parkinson's Hybrids</b> Mak Shing Hung, Technological and Higher Education Institute of Hong Kong, Hong Kong
19:25-19:55	I	<b>Title: TBA</b> Dahms Hans-Uwe, Kaohsiung Medical University, Taiwan
19:55-20:25	I	<b>Title: Models and Data for Industry 4.0 Implementation in Biomanufacturing – A Chicken and Egg Problem</b> Krist V. Gernaey, Technical University of Denmark, Denmark
20:25-20:55	I	<b>Title: Neuroprotective Effects of Esculetin a Natural Coumarin, On PC12 Cells and Zebrafish</b> Chan Shun Wan, Technological and Higher Education Institute of Hong Kong, Hong Kong
20:55-21:25	I	<b>Title: The Novel Compact Handheld Optical Coherent Tomography Probe for Imaging Oral Soft Tissue</b> Alok Kushwaha, The University of Adelaide, Australia
21:25-21:55	I	<b>Title: Noninvasive Metabolomics by Finger Sweat Analysis Supports Management of Chronic Diseases</b> Christopher Gerner, University of Vienna, Austria
21:55-22:25	I	<b>Title: Orchestrating Timely Interplay between Endogenous Stem Cells and Macrophages for Tendon Regeneration</b> Chang H. Lee, Columbia University, USA
22:25-23:00	K	<b>Title: Developments in Microwave Thermoacoustic Tomography Imaging (MTTI) Systems for Biomedical Applications</b> James C. Lin, University of Illinois Chicago, USA
23:00-23:30	I	<b>Title: Addiction Neurobiologists Should Study Resilience</b> Alexandra Dawn Rogers Beasley, University of California, USA

**End of Day 1**

# DAY -2 AUGUST 20, 2024

**Time Zone: London, UK (GMT+1)**

**09:00-09:30 Opening Ceremony**

## Plenary & Keynote Session

09:30-10:10	P	<b>Title: Towards the Concept and Implementation of Digital Twin in Biomedical Signals and Image Processing</b> Sergio Cerutti, Politecnico di Milano, Italy
10:10-10:50	P	<b>Title: Surface Slicing and Toolpath Planning for In-Situ Skin Bioprinted Implants</b> Aleksander Czekanski, York University, Canada
10:50-11:30	P	<b>Title: Interaction of Electromagnetic Radiation with Magnetic Nanovectors in Cells</b> Manuel Ricardo Ibarra, Universidad de Zaragoza, Spain
11:30-12:10	K	<b>Title: Integrating Biomedical Computational Modelling with 3D Printing for Musculoskeletal Biomechanics and 3D Printed Medical Devices</b> Xijin Hua, University of Exeter, UK

## Invited Session

12:10-12:40	I	<b>Title: Pathological Roles of Aquaporin-4 in Neurodegenerative Disorders</b> Masato Yasui, Keio University School of Medicine, Japan
12:40-13:10	I	<b>Title: Establishing a Rapid Response Technology to the Emergence of a New RNA Virus by Developing an RNA Treatment Platform Using Cas13b gene Scissors Technology</b> Sangmin Kang, Jeonbuk National University, South Korea
13:10-13:40	I	<b>Title: Delta (B.1.617.2) Variant of SARS-CoV-2 Induces Severe Neurotropic Patterns in K18-hACE2 Mice</b> Ju-Hee Yang, Jeonbuk National University, South Korea
13:40-14:10	I	<b>Title: Pseudoknot-Targeting Cas13b Combats SARS-CoV-2 Infection by Suppressing Viral Replication</b> Hee-Jeong Han, Jeonbuk National University, South Korea
14:10-14:40	I	<b>Title: Placenta-on-A-Chip: Exploring Maternal-Fetal Interface</b> Jee Yoon Park, Seoul National University, South Korea
14:40-15:10	I	<b>Title: Next Generation Drug Screening Platform for Precision Oncology</b> Jin-Ku Lee, Seoul National University College of Medicine, South Korea
15:10-15:40	I	<b>Title: Investigating Synergistic Effects of Probiotic Formulas for Toxin Reduction in Wine</b> Emily Siu Mei Choi, Technological and Higher Education Institute of Hong Kong
15:40-16:10	I	<b>Title: Preliminary Study of the Influence of Obstetric Data on Uterine Myoelectric Activity in the Third Trimester of Pregnancy</b> Gema Prats Boluda, Valencia Polytechnic University, Spain
16:10-16:40	I	<b>Title: Gold Nanorods Synthesis and Scale-Up for Photoacoustic Theranostic Nanomedicine Approach Against Bladder Cancer</b> Mauro Comes Franchini, University of Bologna, Italy
16:40-17:10	I	<b>Title: Novel System Design for the Bioactive Compounds Production</b> Galaction Anca Irina, Grigore T. Popa University of Medicine and Pharmacy of Iasi, Romania
17:10-17:40	I	<b>Title: Multiple Instance Learning: A New Frontier for Explainable Medical Images Analysis</b> Eugenio Vocaturo, University of Calabria, Italy
17:40-18:10	I	<b>Title: Encapsulation of Active Components in Chitosan and Pectin for Application in Antimicrobial Food-Packaging</b> Jelena Jovanovic, University of Belgrade, Serbia
18:10-18:40	I	<b>Title: The Potential of Transnational Education Partnerships for Ergonomics and Bioengineering Innovations - ErgoDesign</b> Tihomir Dovramadjiev, Technical University of Varna, Bulgaria
18:40-19:10	I	<b>Title: <sup>18</sup>F-Al-Radiolabelling Optimization of PSMA-11 for PET Imaging. Application of an Agile Quality by Design Approach</b> Thierry Bastogne, Université de Lorraine, France
19:10-19:40	I	<b>Title: Control of Cell Culture Microenvironments Using Programmable Systems</b> Maheshwar Adiraj Iyer, Nuclera Corp, USA

**End of Day 2**

# DAY -3 AUGUST 21, 2024

**Time Zone: Chicago USA (GMT-5)**

**09:00-09:10 Opening Ceremony**

## Plenary Session

**09:10-09:50 P Title: Single Cell Metabolomics Technology and Spatial Omics Data Resource**  
Zhang Michael, University of Texas at Dallas, USA

**09:50-10:30 P Title:**  
Feng Ziding, Fred Hutchinson Cancer Research Center, USA

## Invited Session

**10:30-11:00 I Title: Western Red Cedar (Thuja plicata) Essential Oil as a Potential Biopesticide Against Phytophthora Pathogens**  
Sanja Perać, University of Belgrade, Serbia

**11:00-11:30 I Title: Nanoencapsulation of Plant Extracts into Biodegradable Polymer- Development of New Biopesticide for the Spongy Moth Control**  
Goran Branković, University of Belgrade, Serbia

**11:30-12:00 I Title: Bio-Nanocomposites for Active Food Packaging**  
Zorica Brankovic, University of Belgrade, Serbia

**12:00-12:30 I Title: Mechanisms for Modifying Activated Carbon for Enzyme Immobilization**  
Mateus Pereira Flores Santos, State University of Southwest Bahia(UESB), Brazil

**12:30-13:00 I Title: Bacterial Engineering for Biomanufacturing**  
Melanie Arbour, National Research Council Canada, Canada

**13:00-13:30 I Title: Development of 3D Bioprinted Vascular Tissue Models for Therapeutic Screening**  
Jezierski Anna, National Research Council of Canada, Canada

**13:30-14:00 I Title: The Role of P2X7 and P2Y2 Receptors in Mediating Breast-To-Brain Metastatic Transition and Phenotypic Plasticity**  
Claudiana Lameu, University of São Paulo, Brazil

**14:00-14:30 I Title: Improved 3D bioprinting Neural Progenitor Cell Constructs Using Gelatin Methacryloyl (GelMA)/Pluronic F127 Bioink for Neuron-Astrocyte Differentiation**  
Ma Hui Ling, University of São Paulo, Brazil

**14:30-15:00 I Title: Micro Bubbles as Drug-Carrying Agents in the Localized Treatment of Tumours,**  
Walter Duarte de Araújo Filho, State University of Bahia(UNEB), Brazil

**15:00-15:30 I Title: Advances in 2D Materials and Bioactive Glass Scaffolds for Application Tissue Engineering and Bone Regeneration**  
Ketevan Tavamaishvili, Georgian American University, Georgia

**15:30-16:00 I Title: A Review Graphene-Bioactive Glass Composites: Synthesis, Properties, and Applications**  
Fariborz Sharifian Jazi, Georgian American University, Georgia

**16:00-16:30 I Title: Effects Of Online Support And Social Media Communities On Gestational Diabetes: A Systematic Review**  
Melissa D Katz, Weill Cornell Medicine, USA

**End of Day 3**

2<sup>nd</sup> INTERNATIONAL CONFERENCE ON

# BIOMEDICAL ENGINEERING AND BIOTECHNOLOGY

August 21-23 2025 | Barcelona, Spain



**XPERTS MEETINGS**

📍 #3rd Floor, Shanthala Nagar, Bengaluru, 560001

📞 Call Now : +91 8341 464854

✉ Mail : [contact@xpertsmeetings.org](mailto:contact@xpertsmeetings.org)