Conference Overview

2021 The Fifth International Conference on Biological Information and Biomedical Engineering (BIBE2021) was held on July 20-21, 2021 via online platform due to the pandemic of COVID-19. Online BIBE2021 aims to provide a platform for scholars and researchers from all over the world to share their research achievements, discuss the hot issues and exchange the new experiences and technologies in the field of Biological Information and Biomedical Engineering.

The BIBE2021 online conference was attended by nearly 40 experts and scholars. The conference consisted of three parts: keynote presentations, oral presentations and poster presentations.

Professor Bin Chen, from Xi’an Jiaotong University, China, presided over the conference.
Keynote Speeches

We were honored to invite five sophisticated keynote speakers to deliver keynote speeches during the conference.

Prof. Cathy H. Wu
Departments of Computer & Information Sciences and Biological Sciences, University of Delaware, USA
Speech Title: Integrative Text Mining and Semantic Computing for Data-Driven Biomedical Knowledge Discovery

Prof. Yong Zhang
Department of Biomedical Engineering, Faculty of Engineering, National University of Singapore, Singapore
Speech Title: Upconversion Nanomaterials: Properties and Applications in Life Sciences and Medicine (Video Presentation)
The use of electrical impedance for noninvasive characterization of tissues

Congo T.S. Ching

Prof. Congo Tak Shing CHING
College of Engineering, National Chung Hsing University, Taiwan, China
Speech Title: The use of electrical impedance for noninvasive characterization of tissues.

Cell Therapy | Tissue-Engineering

WHY?

Biological substitutes | therapies to repair, replace, or enhance tissue function
- Aging population
  - Failing organs and tissues: not enough available
  - Longer active life-spans
- Needs in surgical procedures, wound care and diseases
  - Lack of material
  - Maintain healing
- Affections are not “drug-able”
- In vitro toxicity testing [replace animal i.e. skin, cornea]

Prof. Lee Ann Laurent-Applegate
Department of Musculoskeletal Medicine DAL, Lausanne University Hospital (CHUV), Switzerland
Speech Title: Bioengineering for Musculoskeletal Medicine: Importance of Cellular Choice in the Swiss Cell Therapy and Transplantation Program (Video Presentation)
Prof. Huiyu (Joe) Zhou
School of Informatics, University of Leicester, UK

Speech Title: Mouse detection and tracking by deep learning.

After keynote presentations, there are 11 orals presentations and poster presentations, oral speakers and poster presenters shared their latest research results with the audience, the audience actively and enthusiastically participated in by asking questions and voting.

Oral Presentations

<table>
<thead>
<tr>
<th>ID</th>
<th>Speech Title</th>
<th>Speaker</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>BIBE57857</td>
<td>The Association between Baseline Serum SHBG and the Number of Retrieved Oocytes in Chinese Infertile Patients Undergoing IVF Treatment of PPOS Protocol: A Restrospective Cohort Study</td>
<td>Kai Deng</td>
<td>Reproductive Medicine Center, Renmin Hospital, Hubei University of Medicine</td>
</tr>
<tr>
<td>BIBE51130</td>
<td>Covid-19 Classification with Deep Neural Network and Belief Functions</td>
<td>Ling Huang</td>
<td>University of Technology of Compiegne</td>
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<tr>
<td>BIBE59256</td>
<td>Differences in Acupuncture Treatment of Dysmenorrhea Between China and Europe</td>
<td>Fengyuan Bai</td>
<td>Hainan Medical University</td>
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<td>BIBE54597</td>
<td>Fluid segmentation in OCT with an improved convolutional neural network</td>
<td>Gang Xing</td>
<td>Xi’an Jiaotong University</td>
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<tr>
<td>BIBE5027</td>
<td>Prediction of the Progression of Coronary Atherosclerotic Heart Disease Using the Wrist Pulse Wave Sequence Features Extracted by Temporal Convolutional Network</td>
<td>Wenbo Qiu</td>
<td>East China University of Science and Technology</td>
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# Poster Presentations

<table>
<thead>
<tr>
<th>ID</th>
<th>Paper Title</th>
<th>Author(s)</th>
<th>Institution</th>
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</thead>
<tbody>
<tr>
<td>BIBE51757</td>
<td>Localizing epileptic focus of patients with epilepsy using post-ictal scalp EEG</td>
<td>Chunsheng Li</td>
<td>Shenyang University of Technology, China</td>
</tr>
<tr>
<td>BIBE58284</td>
<td>Predicting Surgical Outcomes in Epilepsy Patients Using Directed Transfer Function and Computational Model</td>
<td>Chunsheng Li</td>
<td>Shenyang University of Technology, China</td>
</tr>
<tr>
<td>BIBE57060</td>
<td>Computation prediction of the therapeutic effect of metal stent implantation for coronary bifurcation</td>
<td>XiaoTong Yan</td>
<td>University of Science and Technology Beijing, China</td>
</tr>
<tr>
<td>BIBE51032</td>
<td>Effect of Electrode Size and Maximum Current Limitation for Multichannel Transcranial Electric Stimulation Optimization</td>
<td>Minmin Wang</td>
<td>Zhejiang University, China</td>
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<tr>
<td>BIBE55944</td>
<td>Minimally Invasive Synchronous Cardiac Assisted Pump and in Vitro study</td>
<td>Honglong Yu</td>
<td>Hefei University of Technology, China</td>
</tr>
<tr>
<td>BIBE52797</td>
<td>L1/2 Regularization-Based Deep Incremental Non-negative Matrix Factorization for Tumor Recognition</td>
<td>Xiaohui Yang</td>
<td>Henan University, China</td>
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</table>

We would like to express our sincere gratitude to the distinguished keynote speakers, oral speakers, poster presenters as well as all the audiences. This conference has made a big success because of their supports and assistance. We are expecting more and more experts and scholars from around the world to join this international conference next year.