# **BIBE** 2022



The 22nd IEEE International Conference on BioInformatics and BioEngineering

Taichung, Taiwan November 7-9, 2022

# CALL FOR PAPERS

The 22<sup>nd</sup> IEEE International Conference on Bioinformatics and Bioengineering aims at building synergy between Bioinformatics and Bioengineering. These two complementary disciplines hold great promise for advancing research and development in complex medical and biological systems, agriculture, environment, public health and drug design. Research and development in these two areas are impacting the science and technology in fields such as medicine, food production, forensics, etc. by advancing fundamental concepts in molecular biology, by helping us understand living organisms at multiple levels, by developing innovative implants and bio-prosthetics, and by improving tools and techniques for the detection, prevention and treatment of diseases. BIBE solicits contributions in the following non-exclusive lists of areas:

#### Bioinformatics

- AI, Big Data techniques in Bioinformatics
- Algorithms, Modelling of Biosystems
- Biomarkers of Toxicity
- Bio-molecular & Phylogenetic DBs
- Biomedical Image Processing & Analysis
- Blockchain technology in healthcare
- Data Mining & Visualization
- Drug Design, Discovery, Repositioning
- Molecular Evolution and Phylogeny
- NGS Analysis
- Omics Genomics, Epigenetics, Metagenomics, Transcriptomics,

Proteomics, Metabolomics

- RNA Sequence & Structure analysis
- Semantic Computing, Bio-Ontology
- Sequence Search and Alignment
- Pan-cancer study
- Protein Structure Prediction and Molecular Simulation

### Bioengineering

- Biological Systems and Models
- Biomedical & Biological Sensors
- Biomedical Data Engineering
- Bioelectronics, Biomaterials, Biooptics
- Bioengineering Applications for people with disabilities and the elderly
- Body's and Cell's Bio-signatures
- Cell Engineering
- Computer-Assisted Intervention Systems
- Engineering Models in Bio-Medicine
- Medical Robotics
- Nano-Medicine; Nano-Mechanisms for Molecular Systems
- Nano-Bio-Computing
- Neuro-Engineering
- NGS technology
- Tissue Engineering
- Wearable and Implanted sensors

## GENERAL CO-CHAIRS (Arranged in alphabetical order by last name)

- Prof. Eric Y. Chuang, China Medical University, Taiwan
- Prof. Jean-Claude Latombe, Stanford University, USA
- Prof. Ben Wang, Georgia Tech, USA

### KEYNOTE SPEAKERS

- Prof. Gill Bejerano, Stanford University
- **Prof. Alireza Haghighi**, Harvard Medical School
- Prof. Mien-Chie Hung, China Medical University
- Prof. Antonios Mikos, Rice University
- Prof. Soumya Raychaudhuri, Harvard Medical School

## **SUBMISSION**

Authors are invited to submit original, high-quality, and unpublished works to the Conference. The Conference Proceedings will be published by IEEE Computer Society Press. For more information, please visit <a href="https://bibe2022.asia.edu.tw/">https://bibe2022.asia.edu.tw/</a> or contact us at <a href="mailto:ppiddi@gmail.com">ppiddi@gmail.com</a>.

## **IMPORTANT DATES**

Paper Submission Acceptance Notification Camera-ready Submission June 30, 2022 July 31, 2022 August 31, 2022



