DAY	TIME	Grand Ballroom 2 (13F)	Rose Room 1 (13F)
Oct. 29 Monday	8:00 – 9:30	Registration	
	8:50 – 9:00	Welcome from Conference Chair Chair: Professor Jeffrey J. P. Tsai President, Asia University Grand Ballroom 2	
	9:00 – 9:50	**Keynote (1)** **Professor Scott L. Delp** **Stanford University, USA** Chair: Professor Jean-Claude Latombe Stanford University, USA Grand Ballroom 2	
	9:50-10:40	**Keynote (2)** **Professor Yusuke Nakamura** **University of Chicago, USA** Chair: Professor Hideo Matsuda (Osaka University, Japan) Grand Ballroom 2	
	10:40-10:55	Coffee Break	
	10:55-12:15	S1.1 Biological sequence analysis Chair: Professor Tatsuya Akutsu Kyoto University, Japan Grand Ballroom 2	S1.2 Biomedical concepts and measurements Chair: Dr. Emma D. Wilson Lancaster University, UK Rose Room 1
	12:15-13:15	Lunch [Grand Ballroom 2 (13F)] AI revolutionized Healthcare, Speaker: Dr. Andrew Liu NVIDIA, Taiwan	
	13:15-14:35	S1.3 Sequence alignment and high-performance sequence analysis Chair: Professor Osamu Maruyama Kyushu University, Japan Grand Ballroom 2	S1.4 Recent advancements in medical engineering Chair: Professor Wen-Cheng Lai National Penghu University of Science and Technology, Taiwan Rose Room 1
	14:35-15:55	S1.5 Biological network inference and analysis I Chair: Professor Jose Nacher Toho University, Japan Grand Ballroom 2	S1.6 Medical and physiological signal analysis I Chair: Dr. Emma D. Wilson Lancaster University, UK Rose Room 1
	15:55-16:10	Coffee Break	
	16:10-17:30	S1.7 Workshop: Cancer bioinformatics and intelligent medicine Chair: Professor Tatsuya Akutsu Kyoto University, Japan Grand Ballroom 2	S1.8 Biological sensor and data analysis Chair: Professor Golshah Naghdy University of Wollongong, Australia Rose Room 1
	17:30-18:30	Break	
	18:30 – 21:00	Reception Chair: Professor Jeffrey J. P. Tsai President, Asia University Grand Ballroom 1	

Oct. 30 Tuesday	8:00 – 9:30	Registration	
	9:00 – 9:50	**Keynote (3)** **Professor Pui-Yan Kwok** **Academia Sinica, Taiwan** Chair: Professor Ka-Lok Ng Asia University, Taiwan Grand Ballroom 2	
	9:50-10:40	**Keynote (4)** **Professor Lydia E. Kavraki** **Rice University, USA** Chair: Professor Tatsuya Akutsu Kyoto University, Japan Grand Ballroom 2	
	10:40-10:55	Coffee Break	
	10:55-11:55	S2.1 Cancer bioinformatics Chair: Professor Y-h Taguchi Chou University, Japan Grand Ballroom 2	S2.2 Medical image and signal analysis I Chair: Professor Kenshi Saho Toyama Prefectural University, Japan Rose Room 1
	11:55-13:00	Lunch [The Plum Blossom Room1 (13F)]	
	13:00-13:50	**Keynote (5)** **Professor Antonios G. Mikos** **Rice University, USA** Chair: Professor Ka-Lok Ng Asia University, Taiwan Grand Ballroom 2	
	13:50-15:50	**S2.3 Tutorial:** **Professor Nikolaos G Bourbakis** **Wright State University, USA** Grand Ballroom 2	S2.4 Medical signal, sequence detection, DNA barcode Chair: Professor Hiroshi Hagiwara Ritsumeikan University, Japan Rose Room 1
	15:50-16:05	Coffee Break	
	16:05-17:25	S2.5 Cancer and medical bioinformatics Chair: Professor Hsueh-Ting Chu Asia University, Taiwan Grand Ballroom 2	S2.6 Medical image and signal analysis II Chair: Professor Nikolaos G Bourbakis Wright State University, USA Rose Room 1
	17:25 – 18:30	Break	
	18:30 – 21:00	Banquet **Keynote (6)** **Professor Jan-Gowth Chang** **China Medical University, Taiwan** Chair: Professor Jeffrey J. P. Tsai President, Asia University, Taiwan Grand Ballroom 1	

Oct. 31 Wednesday	8:00 – 9:00	Registration	
	9:00 – 9:50	**Keynote (7)** **Professor Wen-Hsiung Li** **Academia Sinica, Taiwan** Chair: Professor Chi-Ren Shyu University of Missouri, USA Grand Ballroom 2	
	9:50-10:50	S3.1 Special paper session - Biomedical Big Data Chair: Professor Jan-Gowth Chang China Medical University, Taiwan Grand Ballroom 2	S3.2 Biological text mining and biomedica informatics Chair: Dr. Khai Nguyen National Institute of Informatics, Japan Rose Room 1
	10:50-11:05	Coffee Break	
	11:05-12:05	S3.3: Biological network inference and analysis II Chair: Professor Wen-Ling Chan Asia University, Taiwan Grand Ballroom 2	S3.4 Computational Modeling and sensor in biomedical engineering Chair: Professor Michael Yong Zhao Nazarbayev University, Kazakhstan Rose Room 1
	12:05 – 13:00	Lunch [The Plum Blossom Room 1 (13F)] (Close)	

S1.1: Biological sequence analysis

S1.2: Biomedical concepts, measurements and image analysis

S1.3: Sequence alignment and high-performance sequence analysis

S1.4: Recent advancement in medical engineering

S1.5: Biological network inference and analysis I

S1.6: Medical and physiological signal analysis I

S1.7: Workshop: Cancer bioinformatics and intelligent medicine

S1.8: Biological sensor, device and data analysis

S2.1: Cancer bioinformatics

Tensor Decomposition-based Unsupervised Feature Extraction for Integrated Analysis of TCGA Data on MicroRNA Expression and Promoter Methylation of Genes in Ovarian Cancer*
Y-H. Taguchi and Ka-Lok Ng

Cancer Screening Using Biomimetic Pattern Recognition with Hyper-Dimensional Structures
Leonila Lagunes and Charles H. Lee

S2.2: Medical image and signal analysis I

Automated Evaluation of Hand Motor Function Recovery by Using Finger Pressure Sensing Device for Home Rehabilitation*
Yuta Furudate, Nanami Onuki, Kaori Chiba, Yuji Ishida and Sadayoshi Mikami

The delta generalized labeled multi-Bernoulli filter for cell tracking*
Chunmei Shi, Junjie Wang, Lingling Zhao and Xiaohong Su

Software Defined Radio-Based Testbed for Wireless Body Area Network
Zhiyu Chen, Junchao Wang, Kaining Han and Zeljko Zilic

Nonlinear CMOS Image Sensor with SOC Integrated Local Contrast Stretch for Bio-microfluidic Imaging
Nan Lyu, Likang Xu, Ningmei Yu and Hejiu Zhang

S2.3 Tutorial: Assistive Research Biotechnologies for People in Need
Professor Nikolaos G Bourbakis

S2.4: Medical signal, sequence detection, DNA barcode

Decision Theory-Based DNA Barcoding Through Quick Response Code Representation*
Cheng-Hong Yang, Kuo-Chuan Wu, Hsueh-Wei Chang and Li-Yeh Chuang

Species Identification using Partial DNA Sequence: A Machine Learning Approachn using Partial DNA Sequence: A Machine Learning Approach*
Tasnim Kabir, Abida Sanjana Shemonti and Atif Hasan Rahman

Comparative Analysis of System-Level Acceleration Techniques in Bioinformatics: A Case Study of Accelerating the Smith-Waterman Algorithm for BWA-MEM
Ernst Houtgast, Vlad-Mihai Sima, Koen Bertels and Zaid Al-Ars

Psycho-physiological Changes Depend on Differences in the Presentation Ratio of Non-target Stimuli
Hiroaki Yoshikawa and Hiroshi Hagiwara

Quantitative Frailty Assessment Using Activity of Daily Living (ADL)
Yasmeen Naz Panhwar, Fazel Naghdy, David Stirling, Golshah Naghdy and Janette Potter

Novel Parameters for ECG Signal Analysis Irrespective of Patient's Age, Sex and Heart Rate
Salah Hamdi, Asma Ben Abdallah and Mohamed Hedi Bedoui

Improved Multifactor Dimensionality Reduction for Epistasis Detection
Li-Yeh Chuang, Cheng-Hong Yang and Yu-Da Lin

S2.5: Cancer and medical bioinformatics

Identification of Several Core Overexpressed MicroRNAs that Could Predict Survival in Patients with Ovarian Cancer*
Eskezeia Y. Dessie, Ezra B. Wijaya, Chien-Hung Huang, David Agustriawan, Jeffrey J.P Tsai and Ka-Lok Ng

Quantitative Analysis of ECI2 Expression from RNA-seq for Breast Cancer Gene Signatures
Ming-Yi Yen, Hsueh-Ting Chu, Yu-Ching Chen and Jeffrey J. P. Tsai

Identification of Potential Long Non-coding RNA Biomarkers for Breast Cancer Patients with Somatic BRCA1 Mutations from RNA-Seq Datasets
Jia-Hua Cai, Yu-Ching Chen, Hsueh-Ting Chu and Jeffrey J. P. Tsai

The Potential Dual-target Inhibitors for HER2/HSP90 Proteins from Traditional Chinese Medicine
Jhih-Ying Chen, Chia-Min Chen, Pei-Chun Chang and Jeffrey J.P. Tsai

Regression-based Documents Reranking for Precision Medicine
Juncheng Ding, Wei Jin and Haihua Chen

S2.6: Medical image and signal analysis II

Detection of *H. pylori* Induced Gastric Inflammation by Diffuse Reflectance Analysis*

* regular paper (revised and dated Oct. 29, 2018)