

The 19th International Symposium on Biomedical and Health Engineering (BHE) and The 23rd IEEE International School and Symposium on Medical Devices and Biosensors (MDBS)

第19届生物医学与健康工程国际研讨会 暨第23届IEEE-国际学校和医疗器械与生物传感器研讨会

Distinguished Guests:

Prof. Jinghui LU (卢景辉教授)

President of Guangdong Medical University, 广东医科大学校长

Prof. Guang NING (宁光院士)

President of Shanghai Ruijin Hospital, 上海瑞金医院院长

Prof. Lisheng LIU (刘力生教授)

Former President of the World Hypertension League, 世界高血压联盟前任主席

Prof. Ming Shi (石明教授)

Vice-President of Guangdong Medical University, 广东医科大学副校长



Prof. Jinghui LU
卢景辉教授



Prof. Guang NING
宁光院士



Prof. Lisheng LIU
刘力生教授



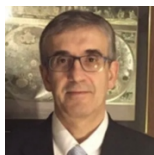
Prof. Ming Shi
石明教授

Plenary and Keynote Speakers:



Kangping LIN, FIAMBE, FIUPESM

President of the International Federation for Medical and Biological Engineering
国际医学与生物工程联合会主席
Chung Yuan Christian University, Taiwan, China



Dimitrios I. FOTIADIS, FIAMBE, FIEEE, FAIMBE

Editor-in-Chief for IEEE Journal of Biomedical and Health Informatics
《IEEE生物医学与健康信息学报》总编辑
University of Ioannina & FORTH, Greece



George S. STERGIU

President of the International Society of Hypertension
国际高血压学会主席
Sotiria Hospital, Athens, Greece



Alta SCHUTTE, FESC, FRRSAf, FAHMS

Former President of the International Society of Hypertension
国际高血压学会前任主席
University of New South Wales, Australia



Paolo BONATO, SMIEEE

Editor-in-Chief for IEEE Open Journal of Engineering in Medicine & Biology
《IEEE医学与生物工程学报》总编辑
Harvard Medical School, Boston, USA



Alberto AVOLIO, FIAMBE, FIEEE

Medical School, Macquarie University, Sydney, Australia
澳大利亚悉尼麦考瑞大学医学院

Conference Details

Conference Chair/Co-Chairs:

Yuanting ZHANG (China)

Paolo BONATO (USA)

David CLIFTON (UK)

Conference Theme:

*Innovation and AI for
Personalized Healthcare*

Conference Dates:

6-8 December 2025

Venue:

*Hyatt Regency, Qinyuan Road,
Dongguan, 523808 China*

Hybrid Modes:

On-site or Online (Zoom)

Free of Charge Registration

Scan the OR Code
or
Please Visit
[https://
www.aemworld.org/
registration2025](https://www.aemworld.org/registration2025)



Enquiry:

Contact Person : Prof. Songtao LI

Phone: +86 13713003132

Conference Secretary: Dr. Zijun LIU

Website Master: Dr. Ting XAING

Website: <https://www.aemworld.org/bhe-mdbs-2025>

BHE-MDBS' 2025 Technical Programme (Tentative)

15:30 - 16:30 on 6 December: Young Scholar Oral Presentation Award Finalists

7 December 2025

The zoom link for presentations and attending the conference: <https://cuhk.zoom.us/j/95818023322>

Opening Ceremony (Chair: Ming Shi)

Time	Speakers	Titles and Affiliations
09:00 - 09:05	Yuanting ZHANG	Opening Speech
09:05 - 09:15	Jinghui LU	Welcome Message President of Guangdong Medical University
09:15 - 09:20	Guang NING	Distinguished Guest President of Ruijin Hospital, Shanghai Jiao Tong University School of Medicine
09:20 - 09:25	Awardees	Young Scholar Oral Presentation Award Presentations
09:25 - 09:30	All Guests	Group Photo Session

Plenary & Keynote Session (Chair: Lin Lin)

09:30 - 10:00	Kangping LIN	"Innovative ECG Measurements and Blood Pressure Variation Analysis During Sleep" Chung Yuan Christian University, Taiwan, China
10:00 - 10:30	Dimitrios I. FOTIADIS	"Trustworthy Prognostic Modelling of Cardiotoxicity and Patient-Reported Quality of Life in Breast Cancer Treatment: The CARDIOCARE AI Approach" University of Ioannina & FORTH, Greece
10:30 - 10:40	Tea/Coffee Break	

Keynote & Invited Talks (Chair: Lodge PUN)

10:40 - 11:00	Daniel FRANKLIN	"Multimodal Wearables for Continuous Hemodynamic Monitoring and Activity Classification" University of Toronto
11:00 - 11:20	Wei CHEN	"Unobtrusive sensing and health informatics" The University of Sydney
11:20 - 11:40	Lizhou FAN	"Artificial Intelligence for Diagnosis of Neurodegenerative Diseases: Towards multimodal fusion of eye-tracking, audio-visual patterns, and beyond" The Chinese University of Hong Kong
11:40 - 12:00	Sio Hang PUN	"Miniaturized Biomedical Systems: Advanced Designs for Brain Science Applications" University of Macau
12:00 - 12:20	Kang CHEN	"Cross-Modal ECG Digital Phenotyping for Dynamic Cardiovascular Risk Prediction" Ruijin Hospital, Shanghai Jiao Tong University School of Medicine
12:20 - 15:00	Lunch Break	

Special Session in Bilingual: AI and Robotics for Hypertension Management (Chair: Wenli CHENG 程文立)
Zoom Link: <https://cuhk.zoom.us/j/95818023322>

15:00 - 15:20	Weijun LI 李卫军	"Intelligent Home-Based Hypertension Management Technology and System" Institute of Semiconductors, Chinese Academy of Sciences
15:20 - 15:40	Chenxu YU 于晨旭	"Integrated Application of Artificial Intelligence and Intelligent Hypertension Management Platforms" CECloud Computing Technology Co., Ltd.
15:40 - 16:00	Wenli CHENG 程文立	"Interpretation of Key Updates in Hypertension Guidelines Worldwide" Beijing Anzhen Hospital, Capital Medical University
16:00 - 16:20	George S. STERGIOU	"The quest for accurate wearable blood pressure monitors" Sotiria Hospital
16:20 - 17:30	Panelists	Wenli CHENG, Weijun LI, Chenxu YU, Yuanting ZHANG

BHE-MDBS' 2025 Technical Programme (Tentative)

8 December 2025

The zoom link for presentations and attending the conference: <https://cuhk.zoom.us/j/95818023322>

Keynote Session (Chair: Xiaorong DING)

Time	Speakers	Titles and Affiliations
08:40 - 09:00	Paolo BONATO	"Digital Endpoints for the Clinical Management of Movement Disorders" Harvard Medical School, Boston, USA
09:00 - 09:20	Alberto AVOLIO	"Challenges in Wearable Cuffless BP Measurements" Medical School, Macquarie University, Sydney, Australia

Special Session: Frontier in Cuffless Blood Pressure Technologies/Tonoarteriography Keynote & Invited Talks (Chairs: Yelei LI & Xiaorong DING)

09:20 - 09:35	Alta SCHUTTE	"Considerations for the implementation of Cuffless BP devices in Clinical Practice" University of New South Wales
09:35 - 09:50	Yelei LI	"Why Cuffless BP Devices Are the Gateway to Digital Health: Industry Insights on User Needs" OPPO Health
09:50 - 10:05	Xiaorong DING	"Advances and Scientific Challenges in Decoding PPG Signals for Accurate Blood Pressure Estimation" University of Electronical Science and Technology of China

Panel Discussion (10:05 - 11:00) (Chairs: Yelei LI & Xiaorong DING)

Technical discussion about the talks
Update and discussion on forming the consortium on cuffless BP
Discussion on the standard

Panelists:

Lisheng LIU	Former President of the World Hypertension League
Alta SCHUTTE	Professor, University of New South Wales
Liqiu YAN	Professor, Guangdong Medical University
Bruce FRIEDMAN	IEEE & ISO Standard Working Group
Art CABRERA	CEO/CMO, Parameters Research Laboratory
Yelei LI	Director, OPPO Health
Sophia SHI	Meta
Xiaoyu GUO	Google
Yuanting ZHANG	Professor, The Chinese University of Hong Kong
Alberto AVOLIO	Professor, Macquarie University
Kaan SEL	Postdoc, Massachusetts Institute of Technology
Lisheng XU	Professor, Northeastern University, China
Xiaorong DING	Associate Professor, University of Electronic Science and Technology of China
Ayca ERMIS	Postdoc, Center for Data Science, Emory University

11:00 - 14:00 **Lunch Break**

Joint Event of BHE-MDBS' 2025: 2nd International Cerebro-cardiovascular Medical Innovation Summit

For the full programme and registration information, please visit: <https://www.icmis2025.com>

14:00 - 15:40	Medical Imaging and Community Healthcare for Cerebro-cardiovascular Health Management
16:00 - 18:20	Navigating Global Innovation Pathways: From Scientific Discovery to Clinical Study

End

Young Investigator Paper Presentation Award

6 December 2025

The link for presentations and attending the conference: <https://meeting.tencent.com/dm/j3YfK5qXiZMR>

(Chair: Lizhou FAN)

Time	Speakers	Titles and Affiliations
15:30 - 15:45	Shirong Qiu	"Wearable Multi-modality Devices for Cardiovascular Monitoring: From Modelling to System Innovation" The Chinese University of Hong Kong
15:45 - 16:00	Weilin Zhang	"Physiologically-Informed Graph Neural Network for Cuffless Blood Pressure Estimation from Multi-Channel Wearable Signals" Shenzhen Technology University
16:00 - 16:15	Zijun LIU	"Continuous Blood Pressure Measurement Based on Optical Sensing and Modeling Analysis of Tonoarteriographic Imaging" The Chinese University of Hong Kong
16:15 - 16:30	Jinting MA	"Real-Time sEMG Decomposition and Neural-Driven Hand Motions Recognition " Shenzhen University
16:30 - 16:45	Ting XIANG	"A Novel Multimodal Physiological-Informed Model (MPIM) for the Unobtrusive Estimation of Dynamic Beat-to-beat Arterial Blood Pressure" The Chinese University of Hong Kong
16:45 - 17:00	Si ZENG	"AI in Biomedicine & Healthcare: Two Innovations " Guangdong Medical University
17:00 - 17:15	Jing CHEN	"Personalized Closed-loop Hypoxia Pre-acclimatization for HighAltitude Adaptation " Beijing Institute of Technology
17:15 - 17:30	Jiaqi YU	"SERS微针耦合CHA/HCR恒温级联扩增技术用于颈部淋巴结结核的早期检测" Guangdong Medical University

End