

CONFERENCE ABSTRACT

2024 13th International Conference on Bioinformatics and Biomedical Science (ICBBS 2024)

October 18-20, 2024

Prince of Wales Hospital, Faculty of Medicine,
The Chinese University of Hong Kong

Sponsored by



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www.icbbs.org

Welcome Letter

Dear esteemed participants,

On behalf of the organizing committee, it is with great pleasure that we extend a warm welcome to all participants of the 2024 13th International Conference on Bioinformatics and Biomedical Science (ICBBS 2024). It is sponsored by The Chinese University of Hong Kong and Biology and Bioinformatics Society (BBS) under the HKCBEEES, and supported by CIRMIS: Interdepartmental Research Center on Management and Innovation in Healthcare, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, Guangxi University. The conference is scheduled to take place in Prince of Wales Hospital, the Chinese University of Hong Kong, Jockey Club School of Public Health, from October 18th to 20th, 2024.

ICBBS 2024 aims to provide a platform for leading academic scientists, researchers, and scholars to exchange insights, share experiences, and present their latest research findings in the field of Bioinformatics and Biomedical Science. We are confident that this gathering will foster meaningful discussions, collaborations, and advancements in these critical areas of study.

Throughout the conference, attendees are able to engage with keynote speakers, invited speakers, industrial and academic workshops, and parallel sessions and so on. We encourage participants to actively participate in oral and poster sessions, presenting their high-quality original research and technical contribution, thereby enriching the conference with diverse perspectives and expertise.

We are honored to gather many leading researchers and industry experts from around the world, and we are excited to witness the exchange of insight and ideas that will shape the future of Bioinformatics and Biomedical Science.

Once again, welcome to ICBBS 2024. We wish you a fruitful and enriching conference experience and hope that your time with us in Hong Kong will be both professionally rewarding and personally fulfilling.

Best regards,

General Chair of ICBBS 2024

Prof. Wing-Kin Sung, The Chinese University of Hong Kong

Conference Venue



Prince of Wales Hospital, the Chinese University of Hong Kong, Jockey Club School of Public Health

Address: No. 30-32 Ngan Shing Street, Sha Tin, New Territories, Hong Kong

Website: <https://www.med.cuhk.edu.hk/facilities/prince-of-wales-hospital>

● Transportation:

✦ Metro

City One Station, Tuen Ma Line

✦ Kowloon Motor Bus

73A: from Wah Ming to Yu Chui Court

80K: from Sun Chui to Yu Chui Court

82K: from Mei Lam to Wong Nai Tau

84M: from Lok Fu to Chevalier Garden

85A: from Kowloon City Ferry to Kwong Yuen

86: from Wong Nai Tau to Mei Foo

89X: from MTR Kwun Tong Station to MTR Shatin Station

✦ Minibus

505: from Sheung Shui San Fat Street to Sha Tin Yuen Chau Kok

804: from Kwong Yuen to Hin Keng

808: from Kam Ying Court to Prince of Wales Hospital

811: from Sui Wo Court to Yu Chui Court

813: from Shui Chuen O to Shek Mun Station

✦ Taxi Stands



1/F, Main Clinical Block and Trauma Centre



2/F, Old Block



Please scan the QR code to learn more
about location and transportation

✧ Hourly Car Park



2/F, Old Block: 24 hours daily

● Recommended Hotel:

Regal Riverside Hotel

Website: <https://www.regalhotel.com/en/regal-riverside-hotel>

✧ [Regal Riverside Hotel Special Rate](#)

Booking Link: <https://shorturl.at/4o6S6> or you can scan the QR code:

Booking Deadline: **10 October 2024**

Please enter the discount code when booking: **ICBBS**



(Please note that there is Complimentary scheduled shuttle bus service to & from the Airport (one round trip, on first-come-first-serve basis). You can simply reserve the seat in the above booking link upon reservation)

● Note:

As the registration fee does not cover accommodation, it is suggested that an early reservation should be done.

Conference Committee

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Chair Prof. Yi Pan, SIAT, Chinese Academy of Sciences

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 Assoc. Prof. Yan Yang, Nanning Normal University
 Prof. Giovanni Improta, University of Naples Federico II
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 Assist. Prof. Keisuke Yanagisawa, Tokyo Institute of Technology
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Assoc. Prof. Heba Afify, Cairo University
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Dr. Zhipeng Cai, Southeast University, China

Agenda Overview

■ Online Test-Oct. 18, 2024, Friday (GMT+8)

Venue: Zoom	Duration
Test for: H2020, H2023, H3006, H2010, H2011, H2001, H1010, H1008	10:00-11:00

■ Arrival Registration-Oct. 18, 2024, Friday (GMT+8)

Arrival Registration & Conference Material Collection	Duration
Venue: Regal Riverside Hotel, Lobby on 1/F	10:00-16:00
Note: the arrival registration also can be done on Oct. 19, 2024 in Prince of Wales Hospital, the Chinese University of Hong Kong, Jockey Club School of Public Health.	

■ Onsite Session-Oct. 19, 2024, Saturday (GMT+8)

Venue: PEC KCTCRC on G/F		Duration
Welcome Address	Prof. Wing-Kin Sung, The Chinese University of Hong Kong	09:00-09:05
Opening Remarks	Prof. Stephen Kwok-Wing Tsui, The Chinese University of Hong Kong	09:05-09:10
Keynote Speaker I	Prof. David Zhang, The Chinese University of Hong Kong (Shenzhen) Speech Title: "AI+ TCM: Research & Development"	09:10-09:50
Keynote Speaker II	Prof. Limsoon Wong, National University of Singapore Speech Title: "Illuminating the Twilight Zone of Protein Function Prediction"	09:50-10:30
Group Photo & Coffee Break		10:30-10:55
Keynote Speaker III	Prof. Tohru Kamiya, Kyushu Institute of Technology Speech Title: "AI Based Anomaly Detection on Medical Imaging"	10:55-11:35
Keynote Speaker IV	Prof. Bing Zhang, Shanghai Jiao Tong University Speech Title: "Gene Editing: A New Hope for Familial Cardiomyopathy"	11:35-12:15
Lunch - Seminar Rooms on 1/F		12:15-13:30

Venue: Seminar Room 1 on 1/F			Duration
Invited Speaker I	Prof. An-Yuan Guo, West China Hospital, Sichuan University Speech Title: "A Method for Predicting Drugs that Can Boost the Efficacy of Immune Checkpoint Blockade"		13:30-14:00
Venue: Seminar Room 1 on 1/F	Venue: Seminar Room 2 on 1/F	Venue: Seminar Room 3 on 1/F	Duration
Invited Speaker II Prof. Pui-Chi Gigi Lo, City University of Hong Kong Speech Title: "Enhancing the Tumor Specificity and Modulating the Oxygen Content for Advanced Photodynamic Therapy"	Invited Speaker III Asst. Prof. Mengsha Tong, Xiamen University Speech Title: "Tracing Unknown Tumor Origins with A Biological Pathway-based Transformer Model"	Invited Speaker IV Prof. Jose Nacher, Toho University Speech Title: "Advancing Network Controllability: Methods, Data Analyses, and Target Control in Complex Biological Networks"	14:00-14:25
Oral Session 1 -- Biomedical Image Segmentation and Image Reconstruction H0015-A, H2002, H2012, H2015, H2017, H3005	Oral Session 2 -- Machine Learning Models for Biomedical Image Classification H0026, H2003, H2006, H2013, H2019, H0029	Oral Session 3 -- Medical Imaging and Computer Aided Diagnosis H0014-A, H0038-A, H2007, H3003, H2021, H2022	14:25-15:55
Coffee Break			15:55-16:15
Venue: Seminar Room 1 on 1/F		Venue: Seminar Room 2 on 1/F	Duration
Oral Session 4 -- Gene Sequencing, Protein Sequence Prediction, and Biomarker Analysis H0030, H3004-A, H0013, H0044-A, H0046-A, H0045-A, H0017-A, H0003-A		Oral Session 5 -- Biomedical Signal Processing and the Application of Machine Learning in Disease Diagnosis H3001, H2004, H0036, H2018, H0040, H1001-A, H0047-A, H1009-A	16:15-18:15

Venue: Seminar Room 3 on 1/F		Duration
Poster Session -- Bioinformatics and Biomedical Image Processing H0010-A, H0006, H1005, H0005-A, H2005, H0034, H0039, H0043-A, H2016, H0009, H0004-A, H0014, H0027		16:00-18:00
Dinner - Seminar Rooms on 1/F		18:30-21:00

Online Session-Oct. 20, 2024, Sunday (GMT+8)

Venue: Zoom		Duration
Invited Speaker V	Prof. Qiao Chen, Xi'an Jiaotong University Speech Title: "Spatio-Temporal Deep Learning with Explainability"	09:00-09:25
Invited Speaker VI	Assoc. Prof. Shinji Kawakura, The Kyoto College of Graduate Studies for Informatics Speech Title: "Data-Acquisition and Data-Processing Methodologies Utilizing Machine Learning-Based, Particularly Deep Learning-Based Techniques in The Field of Various Human Sensing"	09:25-09:50
Invited Speaker VII	Dr. Claudia Cianci, Polytechnic University of Bari Speech Title: "Damage Source Localization by Acoustic Signal Processing: An Experimental Study on Clear Dental Aligners"	09:50-10:15
Break		10:15-10:30
Online Session	Application of Biosensing Technology and Deep Learning in Disease Diagnosis H2020, H2023, H3006, H2010, H2011, H2001, H1010, H1008	10:30-12:30

Tips:

Please arrive at the Conference Room or log in the ZOOM Room 15 minutes ahead of the session. The duration for Keynote Speech: about 35 minutes of presentation and 5 minutes of Q&A. The duration for the first Invited Speech of Prof. An-Yuan Guo: about 25 minutes of presentation and 5 minutes of Q&A. The duration for other Invited Speeches: about 20 minutes of presentation and 5 minutes of Q&A. The duration for Regular Presentation: about 12 minutes of presentation and 3 minutes of Q&A