

 **IEEE
Healthcare Summit**



Integrating BHI and AI to Combat Pandemics



Program Day 3 • 6 October 2021

| Time (Asia) | Session Chair | Category | Speaker(s) | Topic/Title |
|---------------|--|--------------------|--|--|
| 20:30 – 21:00 | Kathy Grise & Julie Bernicker | Opening Ceremony | N/A | Poster Viewing & Networking |
| 21:00 – 21:40 | May Wang | Keynote | Dr. Po-Shen Loh , <i>Carnegie Mellon University</i> | A New Approach for Fighting Pandemics, Combining Game Theory, Mobile Devices, and Network Theory |
| 21:40 – 21:45 | | Transition | | |
| 21:45 – 22:25 | Konstantina Nikita | Keynote | Dr. Dimitris Bertsimas , <i>Massachusetts Institute of Technology</i> | Data-Driven COVID-19 Vaccine Development for Janssen |
| 22:25 – 22:30 | | Transition | | |
| 22:30 – 23:10 | Kathy Grise & Julie Bernicker | Plenary Activities | <ul style="list-style-type: none"> Dr. Roberto Saracco, <i>IEEE Future Directions Committee</i> Dr. Carolyn McGregor, <i>Ontario Tech University</i> | <ul style="list-style-type: none"> Use of Personal Digital Twin in Epidemic Monitoring and Control Pivoting AI for Health and Wellness through Transdisciplinary Innovation to Combat COVID-19 |
| 23:10 – 23:15 | | Transition | | |
| 23:15 – 23:55 | May Wang & Kathy Grise | Keynote | Dr. Elizabeth Mynatt , <i>Georgia Institute of Technology</i> | Combating Health Disparities By Supporting Community Led Covid Response for Underserved Populations |

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| 23:55 – 24:00 | | Transition | | |
| 12:00 – 1:15 | Maria Fernanda Cabrera, Yasemin Akay, & Kathy Grise | Lunch Featured Panels | <ul style="list-style-type: none"> • Dr. Barbara Di Camillo, <i>University of Padova</i> • Dr. Arianna Dagliati, University of Pavia • Dr. Elizabeth Mynatt, <i>Georgia Institute of Technology</i> • Dr. Azadeh Yadollahi, <i>Institute of Biomaterials and Biomedical Engineering at the University of Toronto</i> | <ul style="list-style-type: none"> • Facing COVID Health Disparities in Health Care of ALS and MS Patients: The BRAINTEASER Experience • International EHR data to Conduct Collaborative COVID-19 Research: is Health Informatics Inclusive by Design? • Combatting Health Disparities By Supporting Community Led Covid Response for Underserved Populations • The Lingering Effects of COVID on Women in Academia and Research |
| 1:15 – 1:30 | | Transition | | |

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| 1:30 – 3:00 | Yufei Huang & Byung-Jun Yoon | Plenary Activities | <ul style="list-style-type: none"> • Dr. Ahmed A. Metwally, <i>Illumina AI Laboratory</i> • Dr. Elebeoba E. May, <i>University of Houston</i> • Dr. Mario Flores, <i>University of Texas at San Antonio</i> • Dr. Despina Moschou, <i>University of Bath</i> • Dr. Kristen Beck, <i>IBM</i> | <ul style="list-style-type: none"> • Pre-symptomatic detection of COVID-19 from smartwatch data • Incorporating the Biomedical State of the Host in Multiscale Models of Infection and Disease • Deep Learning in Single Cell Analysis – A Survey of the Application of Deep Learning for scRNA-seq Analysis in the Present Pandemic • Lab-on-PCB Technology and the COVID-19 Outbreak Case Study • Semi-supervised Identification of SARS-CoV-2 Molecular Targets |
| 3:00 – 3:15 | | BREAK | | |

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| 3:15 – 4:00 | Andrew Laine and Subhamoy Mandal | Plenary Activities | <h2>DATA HACKATHON</h2> <ul style="list-style-type: none"> • <i>Best Poster Award (By Invitation Only): Costas Pattichis, Subhamoy Mandal, Mario Flores, Andrew Laine, and Yufei Huang</i> • <i>Best Data Hackathon Award (By Invitation Only): Nantia Nikita, Andrew Laine, Byung-Jun Yoon, Mario Flores, Yufei Huang, Bobak Mortazavi, Subhamoy Mandal, and May D Wang</i> | |
| 4:00 – 4:15 | | BREAK | | |
| 4:15 – 5:45 | May Wang and Kathy Grise | Plenary Activities | <h2>Networking</h2> | |