



International Academy of Medical and Biological Engineering

Affiliated with International Federation for Medical and Biological Engineering

MENU

- About IAMBE
- List of Fellows
- Governing Council
- Bylaws
- Annual Symposium

Annual Symposium of International Academy of Medical and Biological Engineering

September 30, 2021

<https://cmu.zoom.us/j/94040875175?pwd=aGZlRGhHMW8yRlVjMVd0RVdXOXpjQT09>

- 08:50-09:00 *Welcome Remarks*
Bin He, PhD, IAMBE
Trustee Professor of Biomedical Engineering, Carnegie Mellon University
Symposium Chair, and 2018-2021 Chair, International Academy of Medical and Biological Engineering
- 09:00-10:30 *Session I: Medical Imaging and Health Engineering*
Moderator: Zhi-Pei Liang, PhD, IAMBE
Franklin W. Woeltge Professor of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign
Chair-Elect, International Academy of Medical and Biological Engineering
- 09:00-09:30 *Keynote Talk: Using MRI to Assess Neurovascular Health and Disease*
Peter Jezzard, PhD, IAMBE
Herbert Dunhill Professor of Neuroimaging, University of Oxford
Editor-in-Chief, Magnetic Resonance in Medicine
- 09:30-10:00 *Keynote Talk: Cardiovascular Health Engineering: Wearable SUPER-MINDS for Combating CVD and COVID*
Yuan-Ting Zhang, PhD, IAMBE
Chair Professor of Biomedical Engineering, City University of Hong Kong
Chairman & Director of Hong Kong Center for Cerebro-cardiovascular Health Engineering
Editor-in-Chief, IEEE Reviews in Biomedical Engineering
- 10:00-10:30 *Keynote Talk: Artificial Intelligence and the Future of Radiology*
Daniel Ruchert, PhD, IAMBE, FREng
Alexander von Humboldt Professor for Artificial Intelligence, Technical University of Munich
Professor of Visual Information Processing, Imperial College London
- 10:30-11:30 *IAMBE General Assembly (IAMBE Fellows only by separate Zoom meeting)*
- 11:30-12:30 Lunch Break
- 12:30-13:30 *Session II: Biomaterials and Tissue Engineering*
Moderator: Tejal Desai, PhD, IAMBE
Ernest L. Prien Professor and Chair Department of Bioengineering, University of California at San Francisco
President, American Institute of Medical and Biological Engineering
- 12:30-13:00 *Keynote Talk: Addressing Key Biological Barriers for Delivering mRNA, siRNA and Antitumor Chemotherapeutic Agents in Health Disparities Populations*
Nicholas Peppas, PhD, IAMBE, NAE, NAM

	<p>Cockrell Family Regents Chair in Engineering, Professor of Biomedical Engineering and Chemical Engineering Director, Institute for Biomaterials, Drug Delivery and Regenerative Medicine University of Texas at Austin</p>
13:00-13:30	<p><i>Keynote Talk: Cell-Material Interactions and Women's Health</i> Joyce Wong, PhD, IAMBE Professor of Biomedical Engineering, Boston University President-Elect, American Institute of Medical and Biological Engineering</p>
13:30-14:30	<p><i>Session III: Neural Engineering</i> Moderator: Bin He, PhD, IAMBE Trustee Professor of Biomedical Engineering, Carnegie Mellon University 2018-2021 Chair, International Academy of Medical and Biological Engineering</p>
13:30-14:00	<p><i>Keynote Talk: Signal Processing Challenges in Inferring Brain States</i> Emery Brown, PhD, IAMBE, NAE, NAM, NAS Edward Hood Taplin Professor of Medical Engineering and of Computational Neuroscience, MIT Warren M. Zapol Professor of Anaesthesia, Harvard Medical School Director, Harvard-MIT Health Sciences and Technology Program, MIT</p>
14:00-14:30	<p><i>Keynote Talk: Modeling Brain Dynamics: Where are we now?</i> Jose Principe, PhD, IAMBE Distinguished Professor of Electrical and Computer Engineering, University of Florida</p>
14:30-15:30	<p><i>Session IV: Emerging Frontiers in Biomedical Engineering</i> Moderator: Nitish Thakor, PhD, IAMBE Professor of Biomedical Engineering, Johns Hopkins University Vice President-Elect, IEEE Engineering in Medicine and Biology Society</p>
14:30-15:00	<p><i>Keynote Talk: Engineering the Artificial Pancreas</i> Frank Doyle, PhD, IAMBE, NAE, NAM John A. Paulson Dean of Engineering and Applied Sciences, Harvard University</p>
15:00-15:30	<p><i>Keynote Talk: Microbiomedical Implants for Blindness-causing Eye Diseases</i> Yu-Chong Tai, PhD, IAMBE, NAE Anna L. Rosen Professor of Electrical Engineering and Medical Engineering Executive Officer, Department of Medical Engineering California Institute of Technology</p>
15:30-15:45	Coffee Break
15:45-16:45	<p><i>Session V: AI and Biomedical Computation</i> Moderator: Metin Akay, PhD, IAMBE John S Dunn Endowed Chair Professor and Chair of Department of Biomedical Engineering, University of Houston 2021-2024 Chair, International Academy of Medical and Biological Engineering President, IEEE Engineering in Medicine and Biology Society</p>
15:45-16:15	<p><i>Keynote Talk: AI-Enabled Personalized Computational Cardiology</i> Natalia Trayanova, PhD, IAMBE Murray B. Sachs Professor of Biomedical Engineering and Medicine Director, Alliance for Cardiovascular Diagnostic and Treatment innovation (ADVANCE) Johns Hopkins University</p>
16:15-16:45	<p><i>Keynote Talk: Integrating BHI and AI for Combating Pandemics</i> May Wang, PhD, IAMBE</p>

Professor of Biomedical Engineering and Georgia Cancer Coalition Distinguished Cancer Scholar
Georgia Institute of Technology

16:45-17:00

Concluding Remarks

Metin Akay, PhD, IAMBE

John S Dunn Endowed Chair Professor and Chair of Department of Biomedical Engineering, University of Houston

2021-2024 Chair, International Academy of Medical and Biological Engineering

President, IEEE Engineering in Medicine and Biology Society

Copyright © 2014 International Academy of Medical and Biological Engineering. All Rights Reserved.