“Enabling Innovative Technologies for Global Healthcare”

Welcome to the 42nd Annual International Conferences of the IEEE Engineering in Medicine and Biology Society

Shankar Subramaniam
President, IEEE EMBS
Montreal...
Thank you all for your efforts to make this Conference a spectacular success.

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One week immersion courses for graduate students with expert faculty.

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Biomedical Imaging (France)
Biomedical Signal Processing (Italy)
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Neural Engineering (Shanghai)
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EMBS SPONSORS 13 JOURNALS

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- TRANSACTIONS ON MEDICAL ROBOTICS AND BIONICS
ANNUAL CONFERENCES ARE GLOBAL

2005-2021
Shanghai, New York, Lyon, Vancouver, Minneapolis, Buenos Aires, Boston, San Diego, Osaka, Chicago, Milan, Orlando, Jeju, Honolulu, Berlin, Montreal, Guadalajara
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https://www.embs.org/technical-activities/
Diversity & Inclusion at EMB
Launched New Committee to:

01 Redraft EMB Bylaws
02 Overhaul Nomination Process
03 Report Society Metrics Regularly
04 Host D&I Events at All EMB Conferences
05 Increase Senior Women and Fellows
WINNER OF 2020

Academic Career Achievement Award

MICHAEL UNSER
Ecole Polytechnique Fédérale de Lausanne, Switzerland

“For the development of mathematical tools and advanced algorithms for the analysis and reconstruction of images in medicine and biology.”

Nominated by: Xiaoyi Jiang, on behalf of the BIIP TC
WINNER OF 2020
Early Career Achievement Award

WEI GAO
California Institute of Technology, USA

“For innovative and pioneering contributions in the field of bioelectronic devices from wearable biosensors for continuous personalized health monitoring to synthetic micro/nanorobotics for in vivo biomedical applications.”

Nominated by: Lihong Wang
WINNER OF 2020
Distinguished Service Award

MILAN SONKA
The University of Iowa, USA

“For contributions to biomedical imaging research and education.”

Nominated by: Roberto Lavarello
WINNER OF 2020
Professional Achievement Award

DIRK PADFIELD
Google, Inc., USA

“For outstanding professional leadership and significant contributions in the field of medical and biomedical image analysis and processing.”

Nominated by: Roberto Lavarello
WINNER OF 2020 Technical Achievement Award

Vince Calhoun
Georgia State, Georgia Tech, Emory University, USA

“For contributions to data-driven processing of multimodal brain imaging and genetic data.”

Nominated by: Jean Liu
ALLISON OKAMURA
Stanford University, USA

“For the breakthrough technological developments in the field of medical robotics, including designing novel haptic feedback to enhance human performance and opening new pathways for soft robotics.”

Nominated by: Arturo Forner-Cordero
2020 Chapter Awards
2020 EMBS Best Chapter Award

Engineering in Medicine and Biology Society EMBS-Ecuador
2020 EMBS Best Student Club/Chapter Award

Carleton University Engineering in Medicine and Biology Society
2020 Outstanding EMBS Regional Chapter Award Winners

Asia-Pacific

IEEE EMBS Bangladesh Chapter

Latin America

Engineering in Medicine and Biology Society
EMBS-Ecuador
2020 Outstanding EMBS Student Chapter/Club Award Winners

Asia Pacific
- IEEE EMB Student Chapter, University of Moratuwa

Latin America
- Universidad Peruana Cayetano Heredia Student Chapter

Middle East and Africa
- EMBS INSAT Student Branch Chapter

North America
- Carleton University EMB Student Club
2020 NEWLY ELECTED FELLOWS

- Michael Abramoff
- Jung-chih Chiao
- Krzysztof Cios
- Muhammad Hussain
- Tianzi Jiang
- Emil Jovanov
- Michael Miller
- Robert Murphy
- Shouleh Nikzad
- Vasilis Ntziachristos
- Marcia O’malley
- Joseph Reinhardt
- Punam Saha
- Mahinda Vilathgamuwa
- Jong Chul Ye
EMBS Student Paper Competition Award Recipient:

1. Jacob A. George  
   University of Utah  
   Intensity Discriminability of Electrocutaneous and Intraneural Stimulation Pulse Frequency in Intact Individuals and Amputees

Second Place Award Recipient:

2. Madhuvanthi Muralidharan  
   University of New South Wales  
   Towards Controlling Functionally-Distinct Retinal Ganglion Cells In Degenerate Retina

Third Place Award Recipient:

3. Sandya Subramanian  
   Massachusetts Institute of Technology  
   Detecting Loss and Regain of Consciousness during Propofol Anesthesia using Multimodal Indices of Autonomic State
F. STUART FOSTER
University of Toronto, Toronto, Ontario, Canada.

“For pioneering development of micro-ultrasound technology has enabled powerful high-resolution noninvasive imaging to better understand disease development and aid in the evaluation of new therapeutic treatments.”
Toshio Fukuda,
IEEE President
WINNER OF 2020
IEEE Medal for Innovations in Healthcare Technology

MARK S. HUMAYUN
University of Southern California, Los Angeles, California, USA

“For contributions to the treatments of retinal neurodegenerative diseases through the use of prosthetic devices.”
43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society

26 - 30 Jul 2021
Guadalajara, Mexico

See you in Guadalajara
Dr. Metin Akay
2021 EMBS President
IEEE Engineering in Medicine and Biology Society
Your Global Connection to the Biomedical Engineering Community