



**NUS**  
National University  
of Singapore

**iHealthtech**  
Institute for Health Innovation  
& Technology

# "Innovating Health" Distinguished Speaker Seminar Series

## Professor Metin Akay

John S. Dunn Professor of Biomedical Engineering  
Founding Chair, Biomedical Engineering Department  
University of Houston, USA

President, IEEE Engineering in Medicine and Biology Society (IEEE, EMBS)  
Chair, International Academy of Medical and Biological Engineering (IAMBE)



## Advanced Technologies for BRAIN

21 DEC 2022, WED, 4 - 5 PM

NUS, College of Design and Engineering, Building E7, Level 3, Seminar Room 4

Neural Engineering is a new discipline which unites engineering, computer science, physics, chemistry, and mathematics with molecular, cellular, cognitive and behavioural neurosciences, to understand the organisational principles and underlying mechanisms of the biology of neural systems. Furthermore, neuroscience has become a more quantitative, data and information-driven science since emerging implantable and wearable sensors from macro to nano and computational tools facilitate the collection and analysis of vast amounts of neural data collected at multiple temporal and spatial scales. The investigations of complex neural systems and processes require extensive collaboration between biologists, mathematicians, physicists, computer scientists and engineering to improve our understanding of complex neurological processes. To highlight this emerging discipline, we devote this talk to the recent advances in neural engineering research. We will also focus on the influence of maternal alcohol and nicotine co-exposure on the health risk in newborns.

### Speaker biography:

<https://www.bioe.uh.edu/faculty/akay>



Register  
here

[\[Link to the registration form\]](#)



Email: [ask.iht@nus.edu.sg](mailto:ask.iht@nus.edu.sg)