

Dear ICBHI Friends,

The Digital Health Division of the IFMBE has launched together with the International Conference on Biomedical and Health Informatics, a Scientific Challenge. This edition of the Scientific Challenge aims to identify someone's emotions directly from captured brain and body signals. Accurately identifying emotional states is crucial for understanding how emotions affect us and developing novel avenues for diagnosis and intervention. By combining advanced brain scanning methods with the study of bodily reactions, scientists aim to decode how emotions work in our brains and bodies.

In this challenge, participants are given access to a rich dataset of 20 subjects, each containing 30 trials of 25 seconds of data from three simultaneous sources.

- (1) pre-processed fMRI data,
- (2) photoplethysmography (PPG) data,
- (3) respiratory data.

Given your expertise in Physiological and fMRI BOLD Signals, we warmly invite you to participate in this scientific challenge. We encourage you to register and submit your solution to the challenge web site, as well as submit a paper related to your solution.

*Note: All accepted abstracts can be submitted as full text scientific papers within the specified deadline for publication under a Topical Collection of the IUPESM journal Health and Technology. The full-text article will be subject of a peer-review process and subsequent publication in the Health and Technology Journal, Issue 14, Volume 6, 2024.*

For more information on the procedure and data, as well as rules and deadlines, please see <https://www.icbhi2024.com/sc>  
Scientific Challenge Contact email: [icbhi2024.sc@gmail.com](mailto:icbhi2024.sc@gmail.com)

### Important Date for Scientific Challenge

- Dataset open Test (Phase I): **1 April ~ 31 May**
- Abstract submission for SC: 15 April ~ 15 June
- Dataset open Test (Phase II): 15 June ~ 15 July
- Notification of acceptance: 1 August
- Paper final submission: 1 September
- Early registration: 1 October

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#### ICBHI 2024 Secretariat

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