

IEEE Brain Hosts Successful 2025 Workshop

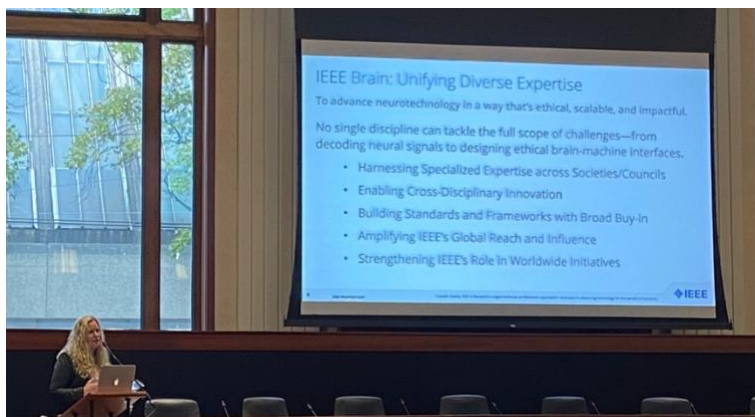
Cynthia Weber

Advances in understanding of the brain both in healthy individuals and those suffering from a disorder is leading to groundbreaking discoveries and engineering solutions. Even so, development and deployment of effective neurotechnology and means of studying the brain through neuroimaging techniques and machine learning requires an integrated approach as well as close collaboration among the neuroengineering community, neuroscientists, and clinical practitioners. The goal of the 2025 IEEE Brain Discovery and Neurotechnology Workshop, held 12-13 September, at Simon Fraser University, Vancouver, BC, Canada, was to bring together researchers and practitioners across academia, industry, and the clinical profession to highlight innovative neurotechnology and brain research methods, emphasizing their potential to improve understanding of the brain and address a wide range of disorders to improve the human condition.

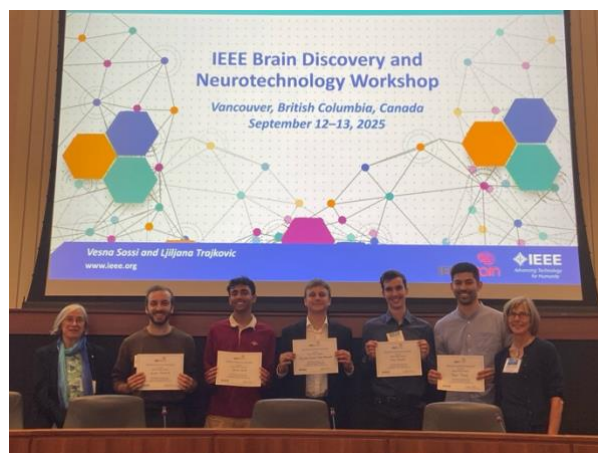
The program consisted of three tracks covering emerging neurotechnologies, machine learning and computer paradigms for brain discovery, and clinical applications and impact. Each track hosted a keynote speaker and invited speakers, including SMC member Christoph Guger (g.tec medical engineering GmbH), who highlighted their work in the context of larger issues in each of these topic areas. Tiago Falk (INRS-EMT, University of Quebec) served as Co-Chair of the Machine Learning and Computer Paradigms for Brain Discovery track. Ljiljana Trajkovic (Simon Fraser University), IEEE Brain 2025 Chair and former IEEE SMC President, and Vesna Sossi (University of British Columbia), past IEEE NPSS President, served as Co-Chairs of the Workshop.



Other program highlights included a panel session on the ethical implications of neurotechnology and the development of standards and a panel exploring clinical priorities and challenges. In addition, representatives from multiple IEEE societies discussed the connections within their society to the mission of IEEE Brain. Kathleen Kramer, IEEE President, introduced this effort and participated in this valuable discussion.



A lively student poster and live demonstration session was held on Saturday, September 13. Five students received awards for Best Posters in the track categories during the final ceremony. These included (from left to right in the photo below): Jordan Hanania (University of British Columbia), Dhruv Vaish (University of California Berkeley), Piotr Nabrzyski (University of Houston), Felix Schwock (University of Washington), and Ryan Takagi (University of British Columbia).



Overall, attendees were excited by the diverse program and appreciated the opportunity to make new connections across fields and IEEE Societies. The next IEEE Brain Discovery and Neurotechnology Workshop will be held in Washington DC, USA, in November 2026. Look for more information coming soon.

More information about the 2025 workshop is available at <https://brain.ieee.org/2025-ieee-brain-discovery-neurotechnology-workshop/>.

