# BCL5

**5th Workshop on Brain, Computation, and Learning**

INDIAN INSTITUTE OF SCIENCE
भारतीय विज्ञान संस्थान

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**04 July | 09:00 – 10:30**
**Faculty Hall**

## Collaborative Informatics Infrastructures for Translational Neuroscience

**Abstract**: This talk will introduce Pennsieve and epilepsy.science, two complementary platforms designed to build an international neural data ecosystem for translational epilepsy research. I will outline our vision to enable scalable, secure, sustainable, and reproducible data sharing and analysis across institutions, with a focus on advancing translational neuroinformatics and supporting clinical decision-making. I will describe the core infrastructure behind Pennsieve, the data types and analytics pipelines supported on epilepsy.science, and how these platforms are being used to standardize and scale research across global epilepsy centers. Through live examples, I will demonstrate how we integrate multimodal datasets—including imaging, electrophysiology, and clinical metadata—to extract meaningful insights that guide therapy and improve patient outcomes. I will also highlight opportunities for collaboration, particularly with partners in India across academia, healthcare, and industry, to advance this shared informatics ecosystem and accelerate progress in translational neuroinformatics research, patient care, and global health impact.