大学院学生各位 To All Graduate Students

## 2024 年度

## 基盤医学特論 開講通知

Information on Special Lecture Tokuron 2024.4-2025.3

Title: INDAK: Dance for your brain

**Speaker/s:** Dr. Jacqueline Dominguez

Associate Professor and Head of the Memory Center at the Institute for Neurosciences, St. Luke's Medical Center in the Philippines; Neuromap-PH Team



日時:令和6年11月27日(水) 16時00分より(90分)

Time and Date: November 27 (Wed.), 2024 16:00~17:30 (90 minutes)

場所:基礎研究棟3階第2講義室

Room: Lecture Room 2 (Basic Medical Research Building, 3rd floor)

Language: English

## **Abstract:**

Dementia is a complex multifactorial disease that poses global public health burden. The current approach to mitigate this problem is the use multicomponent interventions to reduce the risk of dementia and cognitive impairment. Interventions combining exercise, cognitive training, socialization and vascular risk management have been shown to confer cognitive benefits after two years among high-risk population. In the Philippines, the prevalence of mild cognitive impairment (MCI) and vascular risk factors among older persons are high, making this population at high risk for developing dementia and therefore a good target for disease modification and prevention strategies. In a cluster randomized controlled trial (RCT), we investigated the efficacy of dance intervention called INDAK (Improving Neurocognition through Dance and Kinesthetics) to maintain or improve cognition of older adults with MCI while providing standardized vascular care to all participants. Our hypothesis is that dancing provides multiple stimulation, physical, cognitive and social, and requires complex integration of several sensory channels (sensory, vestibular, somatosensory and auditory) and fine motor control. In this seminar, we will present how the pilot phase of the study was conducted, the initial results based on the clinical and behavioral outcomes as well as the findings on magnetic resonance imaging (MRI) particularly cortical surface area (SA), voxel based morphometry (VBM) and functional connectivity seen on resting state fMRI. We will end the seminar with a discussion on the potential mechanisms of the positive effect of dancing on the brain.