



NAME OF LABORATORY: Laboratory for Early Markers of Neurodegeneration (LEMON)

PI: Dr. Anat Mirelman PhD

The LEMON lab is affiliated with the CMCM

Director of Division: Prof. Nir Giladi MD

Research Objectives:

- Better understand the progress of neurodegeneration, specifically its' impact on motor-cognitive function.
- Identify early markers of neurodegeneration through studying genetics, epigenetics and clinical aspects in patients and asymptomatic populations at risk.
- Develop new tools for early detection of functional decline in aging and neurodegeneration and quantify reserve capacity.
- Develop novel treatments to enhance gait and cognition, to reduce the risk of falls and to enhance health-related quality of life.

Main Research topics:

- Genetic and biomarkers
- Motor-cognitive interactions
- Motor cognitive reserve
- Virtual reality to assess and promote motor and cognitive function

Staff: Inbal Maidan, Shiran Shustack, Ora Assias, Lee Goldstein, Marina Sela, Efrat Sales, Batsheva Cohen.

Active Grants:

- F.I.R.S.T. (Bikura) Individual Grants Life Sciences and Medicine, **ISF**
- Identifying sleep disorders at home in individuals at risk for Parkinson's disease, **TEVA- NNE**
- Motor symptoms in populations at risk for developing Parkinson's disease - Gait PPMI; **MJFF**
- Smartphone system to enhance motor, cognitive and social function in elderly, **MOST**

Collaborations:

- Harvard Medical School
- Holon Institute of Technology
- Tel Aviv University
- Columbia University

Contact us: Email - lemon@tlvmc.gov.il