**You are cordially invited to a** **Computational Genomics Seminar**

**Prof. Esti Yeger-Lotem**

Head, Department of Clinical Biochemistry & Pharmacology, Faculty of Health Sciences

Ben-Gurion University of the Negev

*"* *Predicting molecular mechanisms of hereditary diseases by using their tissue-selective manifestation"*

Wednesday **May 11**2022 at **11:15**

**Check Point** building, room **420,**TAU

**Abstract:** How do widely expressed disease genes lead to tissue-specific hereditary diseases? Previous attempts to answer this question were limited to testing few candidate mechanisms. Moreover, although many hereditary diseases manifest clinically in specific tissues, variant interpretation schemes have been mostly oblivious to tissue contexts. To answer this question at larger scale, we developed machine-learning platforms that use tissue-selectivity to predict disease genes and pathogenic variants along with their disease-causality features. Our results suggest that information on patients’ affected tissues enhances genetic and clinical understanding of tissue-specific phenotypes.

Host: Prof. Ron Shamir, School of Computer Science, TAU