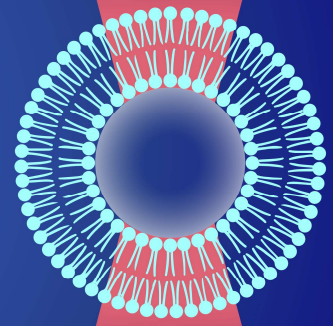


SORKIN LAB

Membrane and cellular biophysics



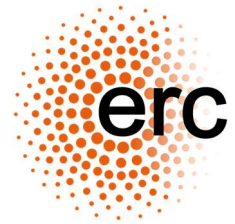
PhD/Post-Doctoral Positions, ERC project: How do tetraspanin proteins organize, shape, and remodel biological membranes?

At the group of Dr. Raya Sorkin, Department of Physical Chemistry, School of Chemistry, Tel Aviv University, Israel, <https://sorkinraya.wixsite.com/sorkinlab>

Start Date: September 2023, **flexible**

Term of appointment: PhD: 4 years, postdoc: 1-year initial appointment, renewal upon mutual agreement for additional 1-3 years.

Funded by: **European Research Council (ERC StG)**



Projects Overview: The project aims to reveal the interplay between membrane tension and curvature and the organization and function of tetraspanin proteins. The context is specific key physiological scenarios: membrane fusion that occurs during viral infection and fertilization, and the formation of vesicles called migrasomes that mediate cellular communication. For these projects you will develop and use membrane model systems such as micro-beads coated with membranes of defined composition with incorporated proteins of interest, GUVs and GPMVs. You will use single-molecule assays to study protein-membrane interactions, analyze data using custom-written python scripts, and use theoretical models for data interpretation, in collaboration with theorists.

Your profile: For this interdisciplinary project, we look for a trained experimentalist with a strong record of research in biophysics or soft matter, preferably with prior experience with microscopy and/or force-spectroscopy. For postdoc positions, a Ph.D. in biophysics, physics, chemistry, molecular biology or a related field is required.

Our lab is equipped with state-of-the-art instrumentation for single-molecule mechanical studies. We are a collaborative and supportive group, and we will provide you will the needed training and support your personal development. We are affiliated with the Center for the Physics and Chemistry of Living Systems at Tel Aviv University that provides a most stimulating environment for biophysical research by bringing together groups from various disciplines that study biophysical problems by a wide range of approaches. The campus is located in the north of Tel Aviv, which is a fun and vibrant city with international atmosphere.

To apply: Interested candidates should apply directly to Dr. Sorkin at rsorkin@tauex.tau.ac.il and provide the following:

- Curriculum vitae
- Cover letter describing your prior experience and motivation to join our lab
- Names and contact information for at least two references.

Relevant recent publications include:

Dharan R. *et al*, Nature Comm. 2023, Dharan R. *et al*, PNAS 2022, Cheppali S. K. *et al*, ACS Appl Mat Interfaces 2022

