Dr. Natalie Zeytuni

Assistant Professor, Department of Anatomy and Cell Biology, McGill University

Structural insights into the cytotoxic peptides ATP-driven exporter essential to pathogenicity of drug resistant Staphylococcal aureus by hybrid approaches.

Dr. Zeytuni is an assistant professor in the department of Anatomy and Cell Biology at McGill University. Her lab studies protein machineries facilitating transport across biological membranes. Dr. Zeytuni obtained her B.Sc. in Marine Biology and Biotechnology from the Ben-Gurion University of the Negev, Israel. She performed her M.Sc. and Ph.D. studies with Prof. Raz Zarivach at the Ben-Gurion University of the Negev. Later, Dr. Zeytuni joined Prof. Natalie Strynadka at the University of British Columbia, Canada for her postdoctoral studies.

Dr. Zeytuni has been awarded with prestigious fellowships and grants during her studies including the Banting fellowship, EMBO long-term fellowship, L’Oréal-UNESCO for Women in Science fellowship and others.

The Zeytuni lab studies bacterial secretion systems and membrane transportation. Bacterial secretion systems are essential membrane embedded protein machineries, enabling bacteria to obtain nutrients, communicate, protect against biological and chemical agents, as well as facilitate disease through the delivery of virulence factors.

The Zeytuni lab integrates structural biology techniques including cryo-EM and X-ray crystallography alongside with biochemical, biophysical and genetic approaches to determine the structure and decipher the molecular mechanisms of these fascinating transport machineries.