

Dana Laor Bar-Yosef, Ph.D

Dr. Dana Laor Bar-Yosef is a molecular biologist and head of the metabolic research group at Prof. Ehud Gazit's lab. She has completed undergraduate studies in biology at the Hebrew University of Jerusalem, and later performed her M.Sc. and Ph.D. training at Tel Aviv University at the Department of Molecular Microbiology and Biotechnology, under the co-supervision of Prof. Martin Kupiec and Prof. Ronit Weisman (The Open University of Israel). Her Ph.D. research focused on the fundamental roles of the TOR protein kinase



(Target of Rapamycin) in cell signaling under environmental stress. Using the fission yeast model system, she has characterized a novel role of the Isp7 protein in TOR-dependent signaling and amino acid homeostasis.

In 2015, Dr. Laor Bar-Yosef joined Prof. Gazit's lab for post-doctoral research. With her extensive experience in yeast analysis and molecular biology, she has successfully established the first *in vivo* model for the study of inborn errors of metabolism (IEMs). This novel model demonstrated for the first time the formation of metabolite amyloid-like assemblies in a whole-organism context, and is part of an integrated drug-discovery platform for IEMs established in collaboration with the BLAVATNIK CENTER for Drug Discovery at Tel Aviv University, which is protected by a patent. Several of the compounds identified using this proprietary approach are currently being investigated in mice.

With over 15 years of research experience, Dr. Laor Bar-Yosef is leading the metabolic research group at Prof. Gazit's laboratory and supervising Ph.D. and MS.c. students and lab workers. Using various models in yeast, nematodes and mice, her research aims to provide a novel approach for comprehensive *in vivo* characterization of IEMs and the discovery of novel therapeutics. The group has established the concept of "*Metabolostasis*" to describe the fundamental cellular processes that drive the homeostasis of aggregation-prone metabolites in health and diseases and aims to shed light on this enigmatic network.

Together with Prof. Gazit, Dr. Laor Bar-Yosef has led the conceptualization and writing of many successful grant proposals, including The John Templeton Foundation research grant, Israel Science Foundation, Momentum Fund and more.

Dr. Laor Bar-Yosef has received the 2020 Ziegler Award for her work in the field of metabolic disorders, a prize dedicated to young scientists with an exceptional contribution to research with medical applications in this field.