<u>Winners of the BGU-FOR June 2023 Grant:</u>

Unveiling the Matrix of Multilevel Risk and Resilience through AI and 30-Year Linked Data

Talia M. Schwartz Tayri, Dan Vilenchik, Avner Ronen, Yaron Ziv, Tarin Paz-Kagan, Tal Barami

This research initiative aims to uncover intricate relationships between multilevel factors (personal, familial, community, water, and environmental) and their impact on developmental hazards and protective factors in the trajectories of 1.2 million Israeli children for 30 years. The research is a collaborative effort among five distinct laboratories. Their collective leadership spans a spectrum of expertise, including advanced data science, social welfare, pediatrics, remote sensing and data science, and water quality.
This collaboration was spurred by the mutual exposure of lab leaders to various research domains of expertise within each other's respective fields during the BGU-FOR retreats. Following these encounters, a shared interest emerged in pioneering transdisciplinary research aimed at catalyzing innovation, with the potential to impact policy and practice, focusing on shaping the future of at-risk Israeli children .