## AMBASSADORS LECTURE SERIES



## MEET OUR AMBASSADORS



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## **SHORT BIO**

I earned my PhD from the Weizmann Institute of Science and completed my post-doctoral research at the National Cancer Institute, Bethesda, Maryland. Upon returning to Israel through the Returning Scientists program, I established my laboratory within the Department of Human Biology at the University of Haifa.

My research focuses on novel strategies to prevent distant recurrence (metastasis) of breast cancer, a primary cause of mortality among breast cancer patients. The risk of breast cancer recurrence persists for many years, even decades, following the initial diagnosis and treatment. This late recurrence stems from tumor cells that disseminated early in the disease's progression to secondary organs and entered a dormant state, evading detection by existing imaging techniques and resisting conventional therapies. My lab is dedicated to developing innovative biological tools to stop these dormant tumor cells from awakening and causing new tumors.

Recognized with numerous international awards, my research has resulted in five patent applications derived from significant discoveries. Additionally, I serve as a scientific consultant for VujaDe Sciences, leveraging my technology for drug discovery. On a personal level, my research is not merely a passion but a life mission, shaped by my own experience as a breast cancer survivor. I firmly believe that our pioneering research holds the potential to introduce novel therapies, save lives, and offer hope to millions of breast cancer patients worldwide.

## **FUNDRAISING NEEDS**

**Preventing Metastatic Recurrence of Triple Negative Breast Cancer by Targeting Dormant Disseminated Tumor Cells.** Triple negative breast cancer (TNBC) represents approximately 10-20% of all breast cancer (BC) tumor types and has a much higher frequency of distant, drug-resistant metastatic disease relapse within 3-5-years of diagnosis of primary tumors, with exceptionally poor outcome. To date there is no cure for metastatic breast cancer disease. We propose to prevent TNBC patients' metastatic recurrence by targeting early disseminated tumor cells (DTCs) that lie dormant at distant organs before they emerge to overt metastases. We identified novel compounds that can disrupt what we predicted as an essential signal that drives dormant tumor cells toward metastatic recurrence. Funding is needed to develop a leading compound for pre-clinical trial studies to prevent TNBC lethal recurrence.