



MEET OUR AMBASSADORS

Sarit Larisch

Full Professor

Head of the Cell Death and Cancer Research Laboratory,
Department of human Biology,
Faculty of Natural Sciences



Field of Research:

Molecular mechanisms of cell death, Cancer research, developing anti-cancer therapies

Link to lab website: <http://larischlab.haifa.ac.il>

SHORT BIO

I received my B.Sc. in Biology from the Hebrew University in Jerusalem and both my M.Sc. (summa cum laude) and Ph.D. from the Lautenberg Center for General and Tumor Immunology, Hebrew University-Hadassah Medical School, Jerusalem. I received the Fogarty International Research Fellowship Award for my post-doctoral studies at the National Cancer Institute (NCI), National Institutes of Health (NIH), Bethesda, USA. At that time, I discovered a novel protein which I termed **ARTS**. My lab and others have found that **ARTS is a central switch to initiate cell death and prevent tumor formation**. ARTS suppresses the initiation of many types of cancers, and is associated with regulation of other diseases such as Parkinson's disease and inflammatory bowel disease.

I am a **Visiting Professor at the Rockefeller University in New York, NY (USA)** since 2002. My work has been recognized with numerous awards and funded through a number of competitive grants from both national and international agencies. Many articles describing our work were published in high-profile scientific journals, and I have registered **twelve patents and patent application based on my discoveries**.

FUNDRAISING NEEDS

Stopping Breast Cancer before it begins

Although treatment of patients diagnosed at early stages of Breast Cancer (BC) is critical for long-term survival, there are currently no optimal drugs that can stop tumor development at that early stage. We suggest a completely novel approach for stopping BC progression; using small molecules that can specifically reverse early-stage BC cells back to their normal state. We have discovered that the ARTS protein which I have discovered provides an essential "checkpoint", preventing normal cells from becoming cancerous. In early stage "pre-cancerous" breast cells, ARTS is inactivated. We have found that treatment of these "pre-cancerous" breast cells with small molecules that mimic the function of ARTS can reverse these cells back to normal. We are now investigating the molecular events leading to this unique phenomenon of "tumor reversion", with the ultimate goal to develop our proprietary molecules to novel preventive drugs for the clinic. We envision that women diagnosed at early stages of breast cancer will be treated with cancer-reversing drugs similar to other chronic diseases. This would transform the potentially lethal disease to a drug-manageable condition. This approach has the potential to revolutionize global care and the quality of life for millions of women at high risk to develop BC. **Funds are needed for investigating the "tumor reversion" phenomenon and establishing "proof of concept" pre-clinical studies for developing the new reverting drug for prevention of BC.**