

Israel Vlodavsky



He received his B.Sc and M.Sc. from the Hebrew University (Jerusalem) and his Ph.D. from the Weizmann Institute (Rehovot, Israel) followed by a postdoctoral training in UCLA and UCSF. He then established the Tumor Biology Research unit of the Hadassah-Hebrew University Medical Center and served as a visiting prof. in Harvard, Sloan-Kettering Cancer Center, and the Australian National University. In 2002, he was recruited to the Technion (Haifa, Israel) where he established the Cancer & Vascular Biology Research Center <http://www.technioncancer.co.il/lab.php?id=3>. His research was published in 355 original papers and 70 review articles (21,000 citations, H index = 76) and presented in over 145 international conferences. Vlodavsky was among the first to realize that the ECM plays an active role in orchestrating cellular responses to normal and pathological situations. His discovery of the ECM as a reservoir for bioactive molecules provided the basis for the current appreciation of the tumor microenvironment and its significance in cancer progression and treatment. A major achievement of Israel Vlodavsky is the cloning and characterization of heparanase, the predominant enzyme degrading heparan sulfate. This enzyme plays important roles in tissue remodeling, cancer metastasis, angiogenesis, inflammation, atherosclerosis, diabetes and kidney dysfunction. Vlodavsky is the pioneering scientist in this area of research, offering basic insights and new treatment strategies for various cancers and other diseases. He is currently involved in rational design of heparanase-inhibiting compounds, of which one entered Phase I/II clinical trial.