



**Current Position:** Postdoctoral research fellow in the Department of Structural Biology at Stanford University School of Medicine

**Education:** Ph.D. in Structural Biology (2009) from The Hebrew University of Jerusalem

**Non-scientific Interests:** Family life (raising and educating our two children, traveling and camping); yachting; marathon running; editor of a poetry journal

More recently, I became involved in a slightly different undertaking: I am involved in an initiative of the Science Museum of Jerusalem, aimed at connecting science and the general public. Together with the museum, I prepared an exhibit of my Alzheimer disease study entitled "Memory's Armageddon: the Brain Fights Back. Alzheimer's Disease and a Research for Development of Innovative Treatment" (<http://brain.mada.org.il/results-e.html>), which creates a dialogue with the visitors, in particular about ethical problems that are emerging from brain research. Developing opportunities for visitors to participate in my research, I discovered that many of these people are very enthusiastic about expanding their horizons, if only given a chance.

I was born in New York, but I grew up in a small Israeli village by the Mediterranean Sea. As a high school student, I worked in an organic laboratory at Tel Aviv University, where I was first introduced to experimental science and was probably "imprinted" for good. My undergraduate studies at the Hebrew University focused on biology and chemistry. During my M.Sc. studies, I gained an extraordinary scientific education from one of the top Israeli scientists in the field of signal transduction, the late Professor Z. Selinger. I became acquainted with several aspects of cancer research through working on the restoration of the deficient GTPase activity of oncogenic c-H-Ras mutants by small molecules. Throughout these years, I worked in the Protein Expression and Purification Facility of the Hebrew University, where I have mastered modern techniques of cloning and expression.

My Ph.D. studies with Professors H. Soreq and O. Livnah focused on Alzheimer disease. I discovered that butyrylcholinesterase, a native brain protein, functions as an attenuator of beta-amyloid fibril formation in Alzheimer disease. For this work, I was awarded the 2007 Kaye Innovations Prize at the Hebrew University, and the Ministry of Science Eshkol Ph.D. fellowship. I was an invited speaker at an international AD conference that was held in Italy, where I gave a talk about the findings reported in a PNAS paper; and last year, at another AD conference, I won the Keystone Symposia scholarship. Three months ago, I started my postdoctoral research at the laboratory of Professor Roger Kornberg at Stanford University.

I can pinpoint the moment when Alzheimer disease burst, full-strength, into my consciousness. It was when Ronald Reagan, following his term as 40th president of the United States, held a small model of the White House and was asked to identify it. He was filmed replying: "It has something to do with me, but I'm not sure what." Since that moment, I wanted to be a part of the effort to fight the terrible outcomes of this disease.

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**Read Dr. Podoly's article entitled:** The Butyrylcholinesterase K Variant Confers Structurally Derived Risks for Alzheimer Pathology ... <http://www.jbc.org/cgi/content/full/284/25/17170>