



**Dr. Roy Beck-Barkai**, Homegrown at Tel-Aviv University, Dr. Beck-Barkai completed his B.Sc. degree in physics and computer science and PhD in low-temperature solid-state physics. Seeking a way to combine physics with biology and medicine, he completed four years post-graduate fellowship in biophysics at the University of California, Santa Barbara. At 2010, Dr. Beck-Barkai was recruitment back to Tel-Aviv University to open an experimental interdisciplinary laboratory for biophysics. His research is focused on the biophysical understanding of the forces and interactions governing the self-assembly of biomolecules to functional nanoscopic structures including the organization principles of cytoskeleton proteins within the neuronal system, intrinsically disordered proteins, membranes and nano-complexes of lipids and proteins. The research combine various biochemical techniques to isolate and express desired products and advance microscopic and biophysical techniques such as small angle X-ray scattering to characterize the structures and their governing intermolecular forces.