

Short bio

Simona Bar-Haim is a senior lecturer at the Faculty of Health Sciences, Ben-Gurion University of the Negev and a physical therapist. She is heading the Laboratory for Rehabilitation and Motor Control of Walking at the Faculty of Health Sciences, Ben-Gurion University of the Negev, Israel. Bar-Haim is the co-founder of Step of Mind Ltd.

Years ago Dr. Bar-Haim was one of the first researchers to investigate the clinical aspects of nonlinear features of the human movement system. She originated the concept, developed Re-Step™ and conducted studies on applying chaotic perturbations to facilitate motor learning and improve walking of persons following brain damage.

In the last 35 years she has been involved in advanced clinical trials and R&D in the field of neuro-rehabilitation. With her students she is currently designing biomarkers and treatment strategies to improve the function of walking of adults with CP and those with acquired brain damage. Her Lab is pioneering the use of fNIRS to study the motor control of walking on challengeable complex environments.