

Mitra Lavasani, PhD

For more than 15 years, Dr. Mitra Lavasani has investigated the impact of adult stem cells on tissue regeneration after neuromuscular injuries and in age-related and pediatric disease. Her laboratory is an interdisciplinary environment dedicated to scientific innovation and clinical translation of novel cell-based therapies.

Dr. Lavasani's work led to the groundbreaking discovery that transplantation of unique multipotent adult stem cells, isolated from the skeletal muscle of young mice, tripled the lifespan and the "healthspan" of old mice. (Healthspan is the period of life in which an individual is healthy, functional and free from disease). This remarkable finding led to a prestigious publication ([Lavasani et al. Nature Communications](#)) and a [U.S. patent](#).

The next critical step is to translate this discovery into an equally novel therapeutic approach to treat aging-related disabilities in humans. Dr. Lavasani's research team is focused on identifying the anti-aging factors secreted by the multipotent adult stem cells, and then understanding their role in restoring function, rejuvenating aged tissues and increasing healthspan. These secreted factors may lead to effective new therapies for aging-related changes: rejuvenated tissues translate to healthier bodies — and healthier aging.

Dr. Lavasani is the Director of the Translational Cell Therapy Lab at Shirley Ryan AbilityLab and an Assistant Professor in the Department of Physical Medicine and Rehabilitation at Northwestern University Feinberg School of Medicine. She holds degrees in molecular biology and systems physiology (BSc), and bioengineering (MS, PhD).