

Hands-on Course on Tissue Engineering

When: FALL SEMESTER (September -December 2017)

Every Tuesday and Thursday from 3.00pm until 5.00pm

Where: Yerevan, Armenia, Orbeli Institute of Physiology

22 Orbeli Brothers Street, Yerevan 0028, Second Floor

COURSE DESCRIPTION

Tissue Engineering is derived from the fields of biology, biochemistry, physics, medicine, chemistry, and applied engineering. By combining cells and biological scaffolds, tissue engineering protocols enable creation of living tissues that can be used to treat a variety of diseases. A list of conditions that can benefit from these approaches include burn injuries, diabetes, heart disease, kidney failure, osteoporosis, dental applications, spinal cord injuries and many others. Clinical use of tissue engineering products and protocols in the US, Europe, and other developed countries has grown exponentially for the past decade. Yet, most developing countries, including Armenia, lack local expertise to produce, or even use the tissue engineering products and protocols. The main goal of this course is to help establish such expertise and to raise awareness of tissue engineering products for future benefit of Armenian public.

COURSE DIRECTOR

Narine Sarvazyan, PhD is a tenured Professor of Pharmacology and Physiology at the George Washington University in Washington DC. Her research focuses on the basic mechanisms of cardiac arrhythmias, tissue engineering and stem cell therapies for heart and vessel repair (details can be found at <http://smhs.gwu.edu/sarvazyan-lab>). Her laboratory has extensive experience with cell culture protocols, stem cell maintenance, lineage specific differentiation,

decellularized tissue scaffolds, tissue engineered constructs and 3D bioprinting. *This course was made possible by the Fulbright US Scholar Program funded by the US State Department.*