Advanced Lectures on Regenerative Medicine

The purpose is to understand basic technologies such as material technology, processing technology, tissue culture technology, and regenerative medicine technology for realizing regenerative medicine and artificial organs from the viewpoint of biomaterials and medical science. Deepen the systematic understanding of elemental concepts such as operation technology of animal cell culture as a basic item, biodegradable polymer, culture carrier processing technology, physical stimulation load technology, biophysical phenomenon, and bioreology. Furthermore, regenerative medicine from the viewpoint of mechanical engineering and medicine. The purpose is to understand basic technologies such as material technology, processing technology, tissue culture technology, and regenerative medicine technology for realizing artificial organs. From the viewpoint of mechanical engineering, culture carrier processing devices, physical stimulus loads. Learn the concept of device design such as devices. Furthermore, by following the basic knowledge of biophysical phenomena, bioreology, etc., hard tissue regeneration medical engineering, soft tissue regeneration medical engineering, cardiovascular regeneration medical engineering, nervous system regeneration medical engineering, we aim to understand the systematic knowledge system of regenerative medicine research.