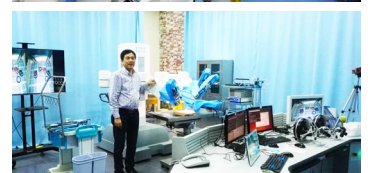
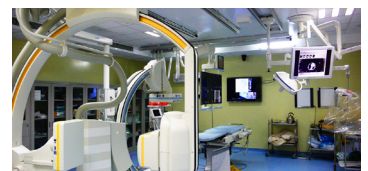
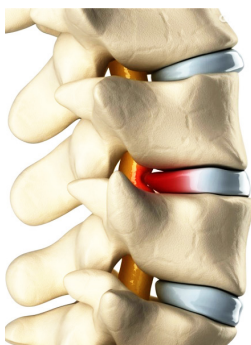




Institute of Biomedical Manufacturing and Life Quality Engineering

1. Description

The Institute of Biomedical Manufacturing and Life Quality Engineering was founded in 1985. It belongs to the State Key Laboratory of Mechanical System and Vibration. It focuses on smart systems and biomedical engineering. In the last twenty years, in collaboration with several hospitals, the institute carried out many creative researches on medical robotic technology, digital medical technology, biomechanics, biomedical manufacturing, biomaterials and artificial organs. The institute won the first-class prize of WU Wenjun Artificial Intelligence Science and Technology Award, the second-class prize of National Science and Technology Progress Award, the second-class prize of National Teaching Achievement Award and the second-class prize of Shanghai Science and Technology Progress Award. There are currently 3 professors, 5 associate professors and 1 assistant professor working in the institute.



2. Key Research Fields

- Modular Robot and Ubiquitous Robot System
- Rehabilitation Robot and Surgical Robot
- Smart Medical Equipment
- Musculoskeletal System Biomechanics and Prosthesis Design
- Smart Materials and Artificial Organ
- Computer Vision and Machine Learning Technology

3. Labs, Centers and Groups

- Smart robotics lab
- Medical equipment lab
- Biomechanics lab
- Smart materials lab

4. Instrumentation & Facilities

- Haptic device: Omega 6.0, Omega 7.0, Geomagic touch
- Optical tracking device: NDI Polaris optical tracking systems
- Bose electro force fatigue test instruments
- Gaitech analysis system
- Shore western axial/torsional tabletop test systems
- Ultra depth of field microscopy system

5. Website

<http://ssemi.sjtu.edu.cn/EN/>

6. Director

Director: Prof. CAO Qixin

Email: qxcao@sjtu.edu.cn