

Ying-Xin Qi, Ph.D. & M.D.

Research Interests

- i. Vascular mechanobiology
- ii. Mechanotransduction
- iii. Vascular proteomics

The professor and director of Institute of Mechanobiology & Medical Engineering, School of Life Sciences & Biotechnology, Shanghai Jiao Tong University. Gained the National Science Fund for Distinguished Young Scholars and the National Natural Science Foundation--Outstanding Youth Foundation, and supported by Program for New Century Excellent Talents in University.

Council Member of Chinese Society of Biomedical Engineering; Council Member of Chinese Society of Biochemistry and Molecular Biology; Committee Member of Biomechanical Section, Chinese Society of Biomedical Engineering & Chinese Society of Mechanics; Editorial Board Member of Journal of Medical Biomechanics; Editorial Board Member of Journal of Biomedical Engineering

Our researches focus on the study of vascular mechanobiology both *in vivo* and *in vitro*, which demonstrates the role of mechanical environment in physiological homeostasis and pathological remodeling of vessel wall. Using the multiscale opinions and technics (based on gene-protein-cell-organ-animal model), we detected the mechanism of which mechanical stimuli, i.e. shear stress and cyclic stretch, induce the functional variation of endothelial cells and vascular smooth muscle cells during atherosclerosis and hypertension. The research may provide some new insights into understanding the pathogenesis of vascular remodeling and developing new targets to the diagnosis and therapy of cardiovascular diseases. The main results were published in PNAS, Nano Lett, Cardiovasc Res, J Hypertens, JMCC (as the first author or the corresponding author).