My current research aims at roles of estrogen in peripheral and central neural control of cardiovascular function. Studies are undertaken on the effect of estrogen on ethanol induced neuronal circuitry, plasticity and chemistry in central cardiovascular areas. And signal transduction and molecular biology studies are undertaken to complement the integrative cardiovascular investigations. Another investigation is focused mechanisms of central cannabinoid receptor one activation induced pressor response. Previously, I had work on the effect of apelin on blood pressure and the underlying mechanism by myograph preparation. In another research project, I proved the benefit of lentil extract in Ang II-induced hypertension and cardiomyocytes hypertrophy. In addition, a study on maternal nutrient on the fetal coronary artery by examination of arterial contractile, dilatory activities, and BKca channel responses using myograph and patch clamp techniques in cow and sheep provide evidences for molecular mechanisms, by which maternal under nutrient increases the risk of coronary artery diseases in the next generation. Besides, in CNS I studied the interaction mechanisms of Angiotensin II and γ-aminobutyric acid in long-term blood pressure regulation.