Essential Hypertension and its Causes: Neural and Non-Neural Mechanisms

With an extremely broad reach, this book aims to give a balanced view of the causes of essential hypertension (EH), its neural, genetic, and environmental causes.

This new account of the pathogenesis of essential hypertension (EH) represents a detailed analysis of the main components of the circulatory control system. Topics covered in this work include the role of various transmitters in autonomic regulation; the place of baroreflexes in the intact organism; why exercise training lowers resting BP; obstructive sleep apnea; non-pharmacological and drug treatment of EH; the role of the kidney in EH and in different types of renal hypertension and the pathogenesis of the Japanese spontaneously hypertensive rat, which provides a valuable animal model for EH. The work suggests that physiological systems analysis in a complex disorder like EH is a valuable tool for using the great advances in molecular biology to best advantage.