Dr. Stauss’ research is focused on better understanding the physiologic mechanisms contributing to heart rate and blood pressure variability and how pathophysiologic mechanisms associated with cardiovascular disease alter heart rate and blood pressure variability. A better understanding of these mechanisms will enable us to study autonomic dysfunction in a variety of cardiovascular diseases, such as hypertension, stroke, coronary heart disease, obesity and others. For example, his past research contributed significantly to the understanding of how impaired myogenic vascular function can lead to enhanced blood pressure variability which increases the risk for cardiovascular end-organ damage, such as hemorrhagic stroke. Recently, he developed implantable nerve stimulators for rats and mice that allow chronic stimulation of various peripheral nerves, including the vagal nerve, and autonomic nerves innervating internal organs, such as the liver.