Pinpointing what makes the cardiovascular system falter and finding ways to intervene is the goal for UTA researchers in kinesiology, bioengineering, nursing, and other disciplines.

New grants include:

- A $1 million NIH grant for Kytai Nguyen (Bioengineering) to recruit and train outstanding doctoral students to develop and use nanomedicine and nanomaterials to battle cardiovascular and pulmonary ailments.

- A $200,000 NIH grant for Yi Hong (Bioengineering) to develop materials that will allow doctors to use a 3-D printer to create unique new blood vessels for children with vascular defects.

- Mark Haykowsky (Nursing) received a $308,000 grant from the NIH to study exercise intolerance in older heart failure patients with preserved ejection fraction, or HFpEF.

Making a difference:

- Paul Fadel (Kinesiology) is examining ways to combat cardiovascular disease and high blood pressure in patients with chronic kidney disease.

- Kay-Yut Chen, Sridar Nerur and Edmund Prater (Business) are studying how patient mortality impacts the psychological load of surgeons performing open heart operations.

- Young-Tae Kim and Khosrow Behbehani (Bioengineering) and Muthu Wijesundara (UTA Research Institute) are developing a method for controlling blood pressure levels in cardiac care environments that uses targeted electrical stimulation rather than drugs.

- Michael Nelson (Kinesiology) is studying the root causes of a heart condition that damages coronary arteries in women.

- David Keller and Paul Fadel (Kinesiology) are investigating methods of battling hypertension-related ailments among African-Americans.

Serving the community:

Mark Haykowsky (Nursing) is an internationally renowned expert in cardio-oncology, which seeks to improve heart health during cancer treatment. He leads FitSTEPS for Life, a free, community-based exercise and nutrition program at UTA designed to help cancer patients increase mobility and boost endurance while undergoing treatment. A partnership with the Cancer Foundation for Life, the program is tailored to each participant.