

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.