



TEXAS HEART[®] INSTITUTE

at St. Luke's Episcopal Hospital

Project Heart

Activities for the Classroom

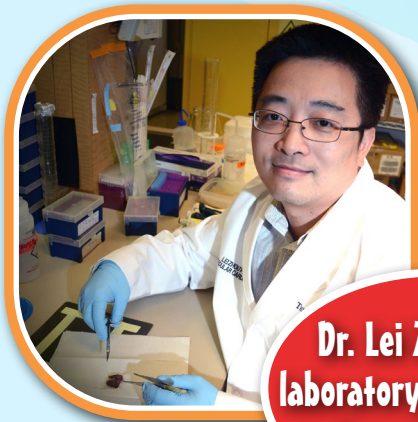
Spotlight on...

**Dr. Lei
Zhou**



Dr. Lei Zhou has dedicated his life to helping sick people.

But unlike a traditional medical doctor, he doesn't help people by seeing them in a doctor's office. He works behind the scenes in a laboratory where he studies ways to use a person's own genes and cells to heal parts of their cardiovascular system that have been damaged. Dr. Zhou is a molecular cardiologist, a doctor who looks at how the heart and blood vessels work cell by cell and how cardiovascular diseases can be prevented and treated.



Dr. Lei Zhou in his laboratory at the Texas Heart Institute.

Dr. Zhou grew up in Nanchang, Jiangxi Province, China,

which made his path to a scientific career very interesting. A series of examinations or tests determined what he would do for a living and what schools he would attend. After placing first in his class in the cardiology category of an entrance exam and then again in a national exam, Dr. Zhou was told he would be pursuing a career in cardiology, the study of the heart.

Dr. Zhou, age 3.



Dr. Zhou spent five years at Jiangxi Medical College for a medical degree (MD) and then another five years at Nanjing Medical University to get a PhD. It was around this time that Dr. Zhou met his biggest supporter, his wife Li Lu. Ms. Lu had just finished her undergraduate education and was recruited as a research assistant in Dr. Zhou's lab while he was working on his PhD project in China. She too loves the sciences and focused her career in biology, the study of living things. Her positive outlook has been a great encouragement to Dr. Zhou during his entire career as a molecular cardiologist.



**Dr. Zhou and
his wife, Li Lu.**

In 2011, Dr. Zhou was named one of five finalists for the American Heart Association Young Investigator prize. This was a huge honor for Dr. Zhou and his work on the treatment of pulmonary arterial hypertension. This disease causes abnormally high blood pressure in the arteries of the lungs, making the right side of the heart work harder than normal. It usually kills patients within three years after diagnosis.

Dr. Zhou and his team at the Texas Heart Institute are using cell-based gene therapy to deliver a substance that

can help people with pulmonary arterial hypertension. This falls in line perfectly with Dr. Zhou's motto: "If it doesn't benefit the patient, it doesn't make a difference."

Dr. Zhou with
his award.

