The Weatherhead PET Center For Preventing and Reversing Atherosclerosis is undertaking the CENTURY HEALTH STUDY, a prospective randomized clinical trial to help clarify two important issues in cardiovascular medicine:

1. Is PET (positron emission tomography) the accurate definitive non-invasive imaging technique for determining which patients need re-vascularization and which patients can be medically managed?
2. What are the additional benefits of intense lifestyle modification and optimal medical management over long term 5-year follow-up?

**About the study**

Numerous published studies have documented the benefits of intense lifestyle modification and medical management of patients with coronary artery disease (CAD). However, few studies demonstrate: (1) how to determine definitively which patients are suitable for intense medical management without invasive procedures, (2) additional benefit of lifestyle modification and, (3) how to integrate these two components of long term cardiovascular care in daily practice.

Commonly used non-invasive imaging tests can frequently be unreliable, thereby making a coronary arteriogram and revascularization necessary. Since cardiac positron emission tomography (PET) is not widely available, its value for providing these definitive answers may not be generally recognized. Remarkable new advances in cardiac PET and additive effects of healthy lifestyle integrated with pharmacologic treatment to lipid goals of LDL and HDL offer potentially improved “state of the art” cardiovascular care.

The Century Health Study will compare outcomes over a five year follow-up of patients randomized to either PET guided treatment and intense lifestyle-pharmacologic management or Standard Care guided by conventional SPECT imaging. Our goal is to demonstrate that definitive accurate non-invasive perfusion imaging is a reliable guide to invasive procedures integrated with intense lifestyle support and pharmacologic treatment to LDL and HDL goals in clinical practice.

**Study Highlights**

- Male or female patients aged 40 or above with a history of stable CAD or suspected CAD who are referred for conventional SPECT imaging are eligible to enroll.
- All PET imaging and study visits are done at no cost to patient.
- Sustained communication is provided for support of the referring physician in ongoing patient care.
- Patients are randomized to PET Guided Care or Standard SPECT Guided Care.
- PET Guided group will get PET results and recommendations based on PET sent to the referring physician for procedures or not.
- PET Guided group will get regular free follow-up with lifestyle support in collaboration with the referring physician.
- SPECT Guided Standard Care group will not get results of PET scan but will go back to referring physician for treatment decisions based on SPECT results without intense Century follow-up.
- Both groups will get follow-up PET scan at 2 and 5 years.

Please consider referring your patients for this unique, beneficial project that has the potential to further advance your “state-of-the-art” cardiovascular practice. Our mutual goal is a healthy, vigorous, “Century” long life for patients.
Principal Investigators and Study Personnel

Collaboration with Referring MDs

Study visits will be carried out in the Weatherhead Center For Preventing and Reversing Atherosclerosis at Memorial Hermann Hospital. We emphasize that our purpose is support for you and your patients to achieve still better “state-of-the-art” care. Unless specifically requested by you, we will not assume primary care of your patients referred for the CENTURY study. CENTURY’s comprehensive program of lifestyle modification will complement, not replace or compete with the referring physician’s care. Our goal is cooperation with other physicians by offering unique imaging technology and lifestyle optimization for the best possible outcomes in evidence-based medicine.

About the study’s investigators

The Weatherhead PET Center For Preventing and Reversing Atherosclerosis offers a successful program combining healthy lifestyle and vigorous pharmacologic treatment with cardiac PET to guide invasive procedures. Dramatic advances in cardiac PET imaging now provide definitive non-invasive measurement of functional stenosis severity and quantitative absolute myocardial perfusion as the basis for invasive procedures or not. As a pioneer in cardiovascular medicine and director of the center, K. Lance Gould M.D has developed the basic concepts, technology, specialized software, protocols and clinical applications that are unique, yet proven over many years in thousands of patients. In order to provide this advanced technology to you and your patients with wider benefit, we are carrying out an extensive, five-year randomized trial funded, in part, by a grant from the Weatherhead Foundation.

Stefano Sdringola M.D, the principal investigator for this study, has over 10 years experience in non-invasive as well as invasive cardiology. Dr. Sdringola joined The University of Texas at Houston in 2000, now Associate Professor and Weatherhead Chair of Cardiovascular Medicine. He received his medical degree from the University of Perugia in 1990 (cum laude) and completed his residency and fellowship training at The University of Texas Medical School at Houston. Dr. Sdringola’s clinical interests are primary and secondary prevention of coronary artery disease, hyperlipidemia management, non-invasive management of stable coronary atherosclerosis and PET guided invasive interventions. His areas of expertise are coronary atherosclerosis stabilization and regression, acute coronary syndromes, interventional cardiology, and nuclear cardiology (PET and SPECT).