“We are excited to be among the first in the country to be using the Echo-Pixel True 3D. It is an excellent planning tool for complex procedures and offers us an opportunity to fine-tune device placement.”

Richard Kovach, MD, Division Director, Interventional Cardiology
The Latest ASE Quantification Guidelines: New and Different for Females

Deborah’s recently sponsored CME conference, The Role of Cardiac Imaging in the Management of Cardiac Disease in the Female Patient, included a session headed by Renee Bullock-Palmer, MD, Deborah’s Medical Director of the Women’s Heart Center. During her presentation, Dr. Bullock-Palmer summarized the new guidelines from the American Society of Echocardiography on cardiac chamber quantification by echocardiography in adults.

The recommendations consider chamber dimension and function, encompassing many parameters, including strain and 3D echo. The guidelines also describe all four chambers, as compared with previous guidelines, which only looked at left ventricular and left atrial information.

Including data from M Mode, 2D linear, 3D volume, 2D contrast, 3D contrast, and strain, there are clear gender differences in size, thickness, and function between men and women for the left and right ventricles, as well as the left and right atria and aortic root.

“Chamber quantification is vital to accurately diagnose patients and determine appropriate management,” states Dr. Bullock-Palmer. “Gender differences should be accounted for when describing chamber size and function. This is especially important for females, as failure to account for gender differences may lead to misdiagnosis and misguided treatment of women.”

Deborah is Seeking Patients for a HTN Research Study

Deborah has announced it is the only site in the state of New Jersey enrolling patients in the clinical trial RADIANCE-HTN. This study screens patients with essential and treatment resistant hypertension for participation in a randomized controlled trial investigating the effect of renal nerve denervation by ultrasound energy.

This FDA Investigational Device Exemption-approved study will evaluate the effect of the ReCor Paradise® Renal Denervation System. The blinded, randomized, and sham-controlled trial is designed to evaluate the blood pressure-lowering effect of the Paradise System in two patient populations:

- The SOLO cohort will evaluate subjects with essential hypertension which is either controlled on one or two antihypertensive medications, or uncontrolled on two or fewer medications with office blood pressure greater than 140/90 mmHg.
- The TRIO cohort will evaluate subjects with treatment-resistant hypertension on a minimum of three antihypertensive medications, and with office blood pressure greater than 140/90 mmHg.

“We are excited about the opportunity to participate in this clinical trial,” states Deborah’s Kintur Sanghvi, MD, the study’s principal investigator at Deborah. “Hypertension is a significant problem and researching new potential treatment options is of great importance.”

More information about the trial, including enrollment eligibility, the study’s parameters, and what is involved, can be found at www.demanddeborah.org or by calling Luot Lewis, Research Coordinator at Deborah, 609-893-1200 ext. 5022, or via e-mail at LewisL@Deborah.org.
Deborah’s new Echo-Pixel True 3D imaging system complements the Hospital’s current high-tech CT and Echo 3D capabilities. The Echo-Pixel technology, however, takes this one step further: With the use of a special virtual reality HP display -- along with sophisticated True 3D interactive Virtual Reality software -- Deborah’s Interventional and EPS Teams now have the capability of manipulating a 3D image in virtual space and perform actual “dry run” placement of devices such as the WATCHMAN, as well as stents and valves. This gives Deborah’s specialists an opportunity to determine the exact size and dimensions required for a particular device prior to going “live” during a procedure. Complex spatial relationships of structures within the heart can also be better understood, which is of great benefit in multi-faceted procedural planning. This type of imaging will also be very useful for other procedures, such as endovascular repair of abdominal aortic aneurysms.

In addition to having another sophisticated imaging system useful in procedure planning, the Echo-Pixel True 3D is an extremely valuable educational tool for the Hospital’s Fellows, providing a hands-on opportunity to work with device placement for patients with complex anatomy -- in a risk-free virtual environment.

Deborah Appoints New Electrophysiologist

**Bringing Specialty Skills in Complex Ablations**

Fei Lü, MD, PhD, FACC, FHRS, has recently joined the staff of Deborah’s Cardiac Electrophysiology (EP) Service.

Dr. Lü is highly skilled in a wide array of EP services, from pacemaker, ICD, and CRT device implantation to complex ablation. He joins Deborah from over a decade’s tenure as the EP Laboratory Director at the University of Minnesota, where he built up a complex catheter ablation program with emphasis on chronic atrial fibrillation (AF) and structural unstable ventricular tachycardia (VT).

Well published in numerous professional journals, with recent interests in catheter ablation of ventricular ectopy, chronic AF, and unstable VT, Dr. Lü additionally served as chief editor of the textbook “Cardiac Pacing and Defibrillation: Principle and Practice.”

Dr. Lü demonstrated that catheter ablation could provide a useful therapeutic tool for patients with chronic AF who failed DC cardioversion, with a 59% fibrillation-free rate over 18 months, and a success rate of 77% in paroxysmal AF. As well, patients with hemodynamically unstable VT -- who were traditionally ineligible for activation mapping and ablation -- could be safely ablated under peripheral hemodynamic support with an 81% clinical success rate.

Dr. Lü’s highly-skilled complex VT ablation expertise complements Deborah’s robust EP Department and state-of-the-art ablation program, which has already been marked as a national leader. Dr. Lü’s extensive experience is now available in both Toms River (732-557-0080) and Browns Mills (609-893-1200 ext. 5100).
Transcatheter Aortic Valve Replacement (TAVR)

**TAVR is now approved for patients with severe aortic stenosis at intermediate or greater risk for open heart surgery.**

The new indication allows for relief of aortic stenosis in patients:
- With symptomatic severe aortic stenosis
- With intermediate or greater risk for open surgical therapy

The PARTNER II S3i trial demonstrated the outcomes for the SAPIEN 3 valve in intermediate-risk patients. The study demonstrated a low 1.1% all-cause mortality and 1.0% disabling stroke rate at 30 days, which were 75% lower than surgical patients in the same risk category.

The Deborah Heart and Lung Center Structural Heart Team is excited about what this expanded intermediate-risk indication means to patients and the benefits that this safer, less invasive therapy will bring.

We look forward to continuing to partner with you to provide world-class care for your patients.