Deborah physicians use robotic navigation and 3-dimensional technology to complete a detailed substrate map of the heart, identifying sick tissue. This provides a precise roadmap for treatment, leading to better outcomes than standard approaches.
Breakthrough in Treating PAD

Deborah has once again led the way as the first in the state to debut the new Pantheris™ lumivascular atherec- tony system – the first device from Avinger which both incorporates real-time optical coherence tomography (OCT) imaging with a therapeutic catheter for treatment of peripheral arterial disease (PAD).

Led by Vincent Varghese, DO, Attending, Deborah’s interventional team was able to use Pantheris’ small imaging element on the tip of the device and -- for the first time -- actually view inside the artery and at the same time shave the plaque away, rather than relying on x-rays and the physician’s sense of touch.

“W e are excited to be able to use this new ly FDA- approved technology. This is a major step forward in treating PAD. Now with the ability to actually see the plaque, we are able to more precisely remove it safely and with less risk of damaging the vessel.”

- Vincent Varghese, DO

Heart Failure: When to Refer to a Specialist

More than two-thirds of heart failure patients are under the care of a primary care physician. Many PCPs who care for these patients with progressive, intensifying symptoms, question at what point a specialist should become involved. Niya Jones, MD, Cardiologist, offers some broad guidelines.

“In general,” she says, “we recommend that physicians gauge their patient’s progress through the American Heart Association and American College of Cardiology (AHA/ACC)’s stages of heart failure A to D.”

• Stage A, a patient has no symptoms, but is at risk for heart failure. Here a primary care physician can have tremendous impact on a patient by encouraging lifestyle modifications like quitting smoking and exercising. Medications are helpful at this stage if a patient has hypertension or other early signs of heart disease.
• Stage B, evidence of weakened heart muscle or other structural abnormalities becomes apparent on testing. At this point, a cardiology consult would be warranted to decide if any procedural interventions can prevent further heart damage, but at this stage, patient care still rests primarily with their family doctor.
• Stage C, progressive heart failure symptoms have develop ed and patients are prescribed a combination of several medications. It is recommended that patients see a heart failure specialist for regular monitoring.
• Stage D -- advanced heart failure -- the patient should be transitioned into a specialty program giving your patients the level of expertise offered at Deborah.

“At any point in the course of progressive heart failure, Deborah’s team is available for a patient consult.” - Niya Jones, MD
Deborah Takes the Lead in VT Treatment

Deborah, long-renowned as a national leader in robotic ablations for treating atrial fibrillation (AF), has now pioneered the next step in complex ablations of ventricular tachycardia or VT, using the Stereotaxis Remote Navigation System.

Currently, many patients at risk for VT have implantable cardiac defibrillators (ICDs), which can rescue them from this life-threatening arrhythmia by delivering electric shocks to the heart, to restore its rhythm. However, Deborah’s complex ablation procedure is a treatment strategy to prevent recurrence of VT and ICD shocks. This ablation therapy uses radiofrequency energy delivered through the Stereotaxis System, offering significant benefits by not only preventing uncomfortable ICD shocks, but also allowing for a gradual reduction of many anti-arrhythmic medications.

Stereotaxis, in the hands of the skilled specialists at Deborah, represents the safest and most effective way to deliver this therapy. With the enhanced safety offered by the robotic procedure, Deborah is also able to perform epicardial ablation, an even more complex procedure which targets radiofrequency energy to not only the inside of the heart, but also the outside.

“Deborah is one of only four centers in New Jersey with this life-saving technology, and the only South Jersey center offering comprehensive and complex ablations using Stereotaxis for treatment of all types of VTs. This is another opportunity for us to cure heart rhythms which have severely compromised the quality of our patients’ lives.” - Pedram Kazemian, MD, Medical Director, Clinical Research

Cutting-Edge Aneurysm Repair

Endovascular Aneurysm Repair (or EVAR) is a minimally-invasive procedure used to repair an Abdominal Aortic Aneurysm (AAA).

When an AAA becomes too large, it may spontaneously rupture, leading to internal bleeding, shock and possibly death. Open surgery, or EVAR, to repair an AAA is usually indicated when the AAA reaches 5.5 cm or greater.

In contrast to open surgical repair of an AAA, EVAR involves the placement of an expandable stent graft within the aorta to exclude the AAA without surgery. Very small incisions are made in both groins to expose the femoral arteries. Vascular sheaths are then introduced into the femoral arteries through which guide wires, catheters, and the endograft are passed. In the past five years, EVAR has accounted for the majority of AAA repairs in the country.

The newest evolution in EVAR is a fully percutaneous EVAR (PEVAR), which is an even more minimally invasive technique. Instead of incisions in the groin, small punctures are made directly through the skin into the femoral arteries. Vascular sheaths are then advanced over small wires into the femoral arteries, through which the catheters and stent graft devices are advanced. Each of the procedures for AAA repair has differing criteria and risks.

“The patients whose aneurysms we are treating minimally invasively are enjoying a much quicker procedure recovery time and return to normal activities.” - Richard Kovach, MD, Chair, Interventional Cardiology
Regional Support Center for Patients with Left Ventricular Assist Devices

Deborah -- long at the forefront of cutting-edge technologies -- is now a pioneer in providing shared outpatient care to monitor patients who have undergone implantation of left ventricular assist devices (LVADs) at implanting centers in the region.

LVADs are mechanical pumps that support the heart and blood flow in patients with congestive heart failure. Previously used for patients who were facing end-stage heart failure, they are used more and more in earlier stages of heart failure, offering increased options for patients waiting for a heart transplant or -- for those who are not transplant candidates -- providing another long-term solution to help keep the heart working.

Niya Jones, MD, a Deborah cardiologist, specializing in advanced heart failure, is excited about the new shared outpatient care program.

“The staff here at Deborah is exceptionally skilled in caring for patients with congestive heart failure, since it is one of our specialty areas,” notes Dr. Jones. “We work closely with our colleagues at the LVAD implant centers to ensure continuity of care, open lines of communication, and offer an opportunity for patients to spend less time traveling to doctors, and more time enjoying their lives. Given the high quality of heart failure care we already provide, it makes sense for patients with LVADs to come here for their outpatient follow-up. By providing outpatient care for patients with LVADs, we are now able to provide truly comprehensive heart failure care. Shared outpatient care is a win-win for everyone.”