

# ADVANCES

THE ACADEMIC DIFFERENCE

TGH Tampa General Hospital

## LEADING THE INDUSTRY

IN TECHNOLOGY, CUTTING-EDGE TREATMENTS, AND COMPLEX CARE



# TAKING ON THE



Dr. Kiran Dhanireddy, Dr. Vijay Subramanian, and Dr. Lucian Lozonschi work together on the first combined heart and liver transplant at Tampa General Hospital, performed on March 10, 2021.



# CHALLENGE



*Tampa General Hospital Transplant Institute performs West Florida's first successful combined heart and liver transplant*

*By Sandra Gurvis*

**W**hat do you do when your patient has two unrelated yet life-threatening conditions? You put together a multidisciplinary team ready to execute precise timing for a 12-hour operation.

That's what Dr. Kiran Dhanireddy, executive director of the Tampa General Hospital Transplant Institute, and teams from the heart and liver transplant programs, anesthesia, and other specialists did in March 2021 as they prepared to perform a combined heart and liver transplant on 56-year-old Justine Gant.

"Mr. Gant's case is unique because his heart and liver disease are not related," said Dr. Debbie Rinde-Hoffman, a Tampa General Hospital cardiologist and medical director of advanced heart failure, who oversaw Gant's pre-surgery care. "Typically, the heart impacts the liver, or the liver disease impacts the heart, but he had two separate conditions."

Although this made Gant a good candidate for the combined transplant—a groundbreaking procedure and the first successful one of its kind in West Florida—it required a high degree of coordination between the heart, liver, and other teams, Dhanireddy noted. The complex surgery took 12 hours from start to finish.



"Each organ transplant has a highly specialized process that is all its own," Dhanireddy explained. "The timing had to be such that the heart transplant needed to proceed smoothly, and then the liver would follow and be implanted shortly after. Both organs needed to start working immediately, and they did."

Step-by-step details were carefully planned. "Our multidisciplinary team met several times to plan all aspects of the surgery, from pre-surgery care to Mr. Gant's recovery," Dhanireddy said. "When the organs did become available, it was fully scripted out."

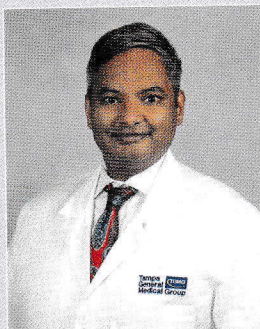
Tampa General is one of only four hospitals in Florida to have accomplished a combined heart and liver transplant. The Tampa General Hospital Transplant Institute has performed more than 11,000 transplants since the program began in 1974 and is now one of the top 10 transplant centers in the nation. The academic medical center has continued to perform a large number of transplants through the pandemic—performing a record 611 transplants in 2020.

Dhanireddy and Dr. Vijay Subramanian, a liver transplant surgeon on staff at TGH, were responsible for the liver transplant portion. Cardiothoracic surgeon Dr. Lucian Lozonschi performed the heart transplant.

"Mr. Gant's heart condition was so severe that he could not be considered a candidate for liver transplant surgery unless his heart condition was addressed," said Lozonschi, who is also a professor and chief of the Division of Cardiothoracic and Transplantation Surgery at the USF Health Morsani College of Medicine and associate director of the Tampa General Hospital Heart & Vascular Institute. "His liver condition was also serious, and he really needed to have both surgeries at the same time."

Dr. Guilherme Oliveira is executive director of Tampa General Hospital's Heart & Vascular Institute and professor and chief of the Division of Cardiovascular Sciences at USF Health Morsani College of Medicine.

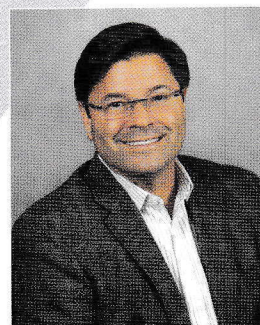
Because the health care team had to remain heavily masked due to pandemic precautions, Gant, who is deaf, could not read lips and used a sign interpreter to help communicate needs and questions—and he also enjoyed teaching sign language to the TGH team, Dhanireddy



Dr. Kiran Dhanireddy



Dr. Debbie Rinde-Hoffman



Dr. Guilherme Oliveira

*In 2020, the Tampa General Hospital Transplant Institute performed a record 611 transplants.*

said. The team's ability to communicate clearly and accurately, as well as Gant's positive attitude, greatly contributed to his recovery.

"Although he had two serious conditions, Mr. Gant has a very positive outlook and that will play a big role in his recovery," said Dr. Benjamin Mackie, medical director of TGH's heart transplant program.

#### **A History of Innovation**

Tampa General has a long history of firsts in the transplant field, including performing the first successful heart transplant in Florida in

Dr. Debbie Rinde-Hoffman speaks through a sign-language interpreter to double-transplant patient Justine Gant.



1985; it has since performed more than 1,400 heart transplants. TGH performed its first liver transplant in 1987 and has since performed more than 2,000.

Tampa General has continued being an innovator in the transplant field. It is one of about 40 transplant centers nationwide using the Paragonix SherpaPak Cardiac Transport System to transport donor hearts to the hospital. "This device cools the donor heart to the right temperature and keeps it at the right temperature," said Dhanireddy.

Studies show that hearts transported in the





SherpaPak—which controls the cooling of the heart more precisely than the traditional method of packing it in ice—are more likely to be transplanted successfully.

Tampa General also is known as a national leader in using mechanical devices that can help diseased hearts function better. Called mechanical circulatory support or ventricular assist devices, these devices can be implanted to help patients survive until their transplant, recover from a cardiac event, or be used as an alternative to a transplant.

Along with these new heart technologies,

the Tampa General Hospital Transplant Institute is creating strategies to utilize more living donations for the kidney and soon for the liver. “We are adding to and developing a highly expert team, one that can perform complex operations for all types of donors and recipients,” Dhanireddy said.

Another goal of both the Tampa General Hospital Transplant Institute and TGH is the expansion of programs to help underserved populations. “Historically, minority populations have been disadvantaged,” Dhanireddy said. “Part of our mission is to serve every per-

son in the community, so they have access to the best medical care. We are working on a specialized approach geared toward their cultural, linguistic, and socioeconomic needs.”

But as always, the proof is with the patient. “The thing I’m looking forward to the most is playing with my grandkids and playing basketball,” Gant signed through an interpreter after the surgery. “Those are the things I love to do most, and I haven’t been able to do them for such a long time. Before my surgery, I was always just so tired. I’m so excited to be able to do them again.” ►