

## Ultrasound technologists provide vital medical service

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ALEXIA FODERE / FOR THE MIAMI HERALD

Luis Pairot enjoys the technical aspects of his career in ultrasound, along with interacting with doctors and patients. On a typical workday, Luis Pairot may help guide a needle to a joint, measure a tumor or check the narrowing of an artery, all using sound waves as the tools of his trade.

Pairot, a lead ultrasound technologist at University of Miami Hospital and Clinics, enjoys the interaction with patients and doctors, as well as the technological and investigative aspects of the job.

“It’s very rewarding. It’s very challenging,” said Pairot, 42, who made a career change into the ultrasound field several years ago. “You develop good relations with your radiologist. They depend on us, and when they trust you it makes a big difference.”

Ultrasound technologists, also called diagnostic medical sonographers, operate ultrasound machines, using high frequency sound waves to create images of the inside of the body for diagnostic purposes. While ultrasound technology is perhaps best known for its use in pregnancy, it is also used to make images of the abdomen, vascular system and heart.

Ultrasound technologists are one kind of medical-imaging technologist. Others specialize in X-rays, CT scans or MRIs.

“Imaging sort of marries the opportunity to use technical knowledge and use it on real, state-of-the-art equipment, and combines that with the ability to still interact with patients,” said Carol Miller, dean of the School of Health Sciences and Academic Affairs at Miami Dade College Medical Center campus.

Demand for the job is growing, as ultrasound technologists are increasingly needed not just at hospitals, but at clinics, doctors’ offices and other healthcare facilities, Miller said.

“With the expansion of outpatient centers and ambulatory care centers, there is a need for imaging technologists, so there is more need because of more opportunities,” she said.

The U.S. Bureau of Labor Statistics projects that demand for diagnostic medical sonographers will grow 18 percent from 50,300 in 2008 to 59,500 in 2018.

A desire to work with people in a helpful role and the ability to make decisions are key for the career, experts in the field say.

“We look for someone who likes to work with people, because you have a close relationship with patients, and you need to have an interest in working in healthcare,” said Orlando Duran, executive director of hospital radiology services for University of Miami Sylvester Comprehensive Cancer Center, which has about 65 imaging technologists, and is in the process of hiring its fifth ultrasound technologist.

Duran said that imaging technologists' salaries range from about \$40,000 to about \$65,000 a year at his facility, depending on experience and specialty. Ultrasound technologists start at about \$47,000 a year right out of school, and average about \$58,000, he said.

That's in line with statistics from Florida's Agency for Workforce Innovation, which shows that radiologic technologists in Florida earn from \$39,440 to \$58,800, with a median salary of \$51,610. Diagnostic medical sonographers in Florida earn between \$44,410 and \$65,180 a year, with a median salary of \$58,680, the figures show.

In South Florida, schools offering an Associate of Science degree in various types of radiologic and imaging technology include Keiser University, Miami Dade College and Broward College.

In addition to schools, some hospitals offer nondegree training programs. Jackson Memorial Hospital School of Technological Radiology accepts 12 to 15 students a year into its two-year program for radiologic technologists, Duran said. The cost is about \$3,000 per year.

The Bureau of Labor Statistics shows that demand for radiologic technologists will grow 17 percent, from 214,700 in 2008 to 251,700 in 2018.

Before they can be employed, technologists must pass national board exams to be licensed.

Keiser University offers two-year associate of science degrees in radiology (which includes X-rays and can lead to certification in mammography, cat scans and MRIs), nuclear medicine (which involves injecting radioactive isotopes), diagnostic medical sonography (ultrasound) and diagnostic vascular sonography (ultrasound for veins and arteries, etc.), said Dr. Mary Jane Moore, associate vice chancellor of academic operations at Keiser University.

Radiology and nuclear medicine degrees are offered at Keiser's campuses in Miami and Fort Lauderdale; while the ultrasound degrees are offered only in Fort Lauderdale. The cost for each is about \$6,600 per semester, and the programs include three semesters per year for two years, Moore said.

“In all allied health, we're kind of counter cyclical,” she said. “When the economy goes down, enrollment goes up because we are very career-focused. People want a new career and go back to school.”

Graduates from Keiser work at a variety of sites, including Baptist Health System, Miami Children's Hospital and Memorial Healthcare System, said Keiser spokeswoman Kelli Lane.

John Blay, 44, of Tamarac, is among those studying diagnostic vascular sonography at Keiser. When he graduates in a year, he will begin his third career, after 16 years as a ski instructor, and then about three years as a software engineer.

“I have always had a passion for learning more about the heart and the vascular system as a whole, so I decided to look into the program,” Blay said. “It's the best of both worlds for me, from the technological side and the medical side.”

Broward College also offers associate of science degrees in radiography, nuclear medicine technology and diagnostic medical sonography, said Gregory Ferenchak, dean of Health Sciences at Broward College's north campus.

The sonography and nuclear medicine programs take in 15 new students a year, while the radiography program takes in 36 students, Ferenchak said.

Miami Dade College also offers associate of science programs in diagnostic medical sonography, with specializations in abdominal, obstetrics, gynecology and adult echocardiography, Miller said.

In addition, the school has associate of science programs in radiography and nuclear medicine. The length of the programs can vary between 54 to 77 credits.

MDC and Broward College both charge about \$87 per credit for Florida residents. That means the cost of tuition comes to \$5,000 to \$6,700 for the entire two-year degree, depending on which program the student chooses. MDC has graduated at least 2,400 students in imaging fields over the last few decades, and accepts 25 new students into its sonography program each year and 50 new radiologic technology students each year, Miller said.

Upon graduation and licensure, students can enter the workforce at \$42,000 to \$68,000 a year, she said.

“They truly are an important part of the overall healthcare team, because everyone is relying on their knowledge and expertise to give them the best results so they can make the best diagnosis,” Miller said. “And it's nice to be important and needed.”