

A 35-year-old male was transferred to our hospital from a small emergency department in Connecticut with a pulmonary embolism diagnosed on chest CTA. He arrived in sinus tachycardia but his vital signs were otherwise normal. I brought an ultrasound machine with me into the room to assess for right heart strain but did not expect to see what I found: a clot-in-transit. I immediately activated the pulmonary embolism response team, and this hemodynamically stable patient was given TPA. Without the point-of-care ultrasound, this patient would have waited hours for a formal echocardiogram, exponentially increasing his risk of destabilizing and going into cardiac arrest. Ultimately, he was able to walk out of the hospital and return home to his wife and children.

Like most medical students, I had no ultrasound exposure before starting medical school. That all changed when I attended -----, which had a robust four-year ultrasound curriculum that ignited my interest in ultrasound. Throughout medical school, ultrasound education was woven into both the basic science curriculum and clinical rotations, and as a third- and fourth-year medical student I was able to teach ultrasound within the curriculum. This foundation allowed me to incorporate ultrasound more efficiently into patient care and expand my ultrasound knowledge base earlier in residency.

As a first-year resident, I was able to identify a subtle cholecystitis with WES sign in a patient thought to have acute coronary syndrome, a McConnell's sign in a COVID positive patient who was unable to get a CTA, and a bowel obstruction in a nonverbal patient with abdominal pain. These cases have influenced my attendings and consultants to alter their decision-making. My most rewarding ultrasound was a 28-year-old male with chest pain who had an "abnormal EKG" which cardiology felt was his baseline. An anterior wall motion abnormality on my PoCUS exam convinced them to take him to the cath lab, where they found a completely occluded LAD. These cases were just a few where I witnessed ultrasound improve clinical care and disposition time. They have made me realize how important ultrasound is across specialties, beginning in undergraduate medical education.

During residency I have also had the opportunity to teach ultrasound to both residents and medical students through lectures and bedside teaching. Whether it is teaching new interns at our orientation ultrasound "boot camp," holding impromptu image review sessions for interested residents, or teaching ultrasound across the medical school curriculum, there have been countless opportunities for me to share my passion for ultrasound to learners. The joy I get from teaching a resident how to improve their ultrasound skills, or even walking them through a fascia iliaca nerve block, is second only to seeing that resident develop their own passion for ultrasound and go on to teach others.

Ultimately, my career goal is to teach medical students, residents, or fellows at an academic institution while consistently leading or participating in ultrasound research and quality improvement projects. I envision an ultrasound fellowship as an opportunity to teach a variety of learners what I believe is essential in practicing medicine, to gain skills that will allow me to independently conduct robust ultrasound research, to network with regional, national, and international ultrasound leaders, and to learn emerging applications such as regional anesthesia and transesophageal echocardiography. Collectively, this will increase my ultrasound confidence in any setting and for any purpose, as well as improve my teaching and writing skills.