As a woman lay in front of her on Pittsburgh's South Negley Avenue, fourth-year medical student Vanessa Franco was faced with a premature and unexpected test of her training.

"Her face was pretty blue," says Franco. "When I checked her pulse, I realized she didn’t have one." A fellow fourth-year, Rannal Samarasinghe, monitored the woman's vital signs as Franco performed CPR chest compressions. (Med students at Pitt are required to be certified in CPR, though neither Franco nor Samarasinghe had ever administered it before on anyone.)

"I was terrified of losing her," Franco revealed to a reporter later. Gradually, the color returned to the woman's face, and paramedics arrived with an AED to shock her heart back into rhythm before she was rushed to UPMC Shadyside's ER.

The woman collapsed on a Sunday morning last November, as Franco and Samarasinghe were driving to Giant Eagle in Shadyside. Where South Negley crosses the Port Authority East Busway, a group of people huddled around the woman were yelling for help. Franco and Samarasinghe pulled over and intervened. It turned out that the woman was a KDKA news anchor and mother of three, Susan Koeppen (shown above, flanked by the students), who suffered from a defect of the mitral valve, which facilitates the flow of oxygenated blood in the heart. She had gone into cardiac arrest while on a run with friends. (She was training for a half marathon.)

In March, the now-40-year-old Koeppen underwent open-heart surgery to repair the faulty valve, then made a full recovery, and resumed her position at the news desk in May.

Samarasinghe and Franco are in the medical scientist training program; they will finish their MDs this fall and then pursue postdoctoral work before starting residencies. Both have PhDs in neuroscience. Franco hopes to enter emergency medicine; Samarasinghe recently decided on neurology. Franco has been pursuing research on marathon runners and heart health. She conducted a pilot study during the Pittsburgh Marathon that she hopes to replicate in other races around the country. (She pursued the study with the help of executive vice chair of emergency medicine Clifton Callaway, an MD/PhD who is the Ronald D. Stewart Professor of Emergency Medicine, and Dave Hostler, a PhD research associate professor of emergency medicine.) The encounter with Koeppen has made the work even more meaningful to Franco.

— by Hayavadhan Thuppal

— Photo by Martha Rial