



LEADING THE WAY

There are approximately 4,700 cardiothoracic surgeons in the United States—and less than 4 percent of those surgeons are women. AHN's Dr. Mitsuko Takahashi is one of them.

BY JENNIFER BROZAK

As the average life expectancy of people living in developed countries continues to rise, so does the need for specialists to treat conditions that primarily affect an aging population. Among those conditions are a host of cardiovascular and lung diseases, such as heart disease, peripheral artery disease and lung cancers.

As such, cardiothoracic surgery remains one of the most in-demand specialties in the field of medicine. There are approximately 4,700 cardiothoracic surgeons in the United States—and less than 4 percent of those surgeons are women. In Pittsburgh, there are only a handful of surgeons who specialize in both cardiothoracic and vascular surgery.

One of those surgeons, Dr. Mitsuko Takahashi, is located right here in the South Hills. A native of Southern California who now lives in South Park, Dr. Takahashi earned her medical degree from Des Moines University. She then completed her residency at the Wyckoff Heights Medical Center and a fellowship at Mount Sinai Hospital, both in New York. She joined the Park Cardiothoracic and Vascular Institute, which is based out of Jefferson Hospital, in 2012.

HOW DID YOU DECIDE ON CARDIOTHORACIC AS YOUR SPECIALTY?

I liked all surgery, but the chest seemed to be a very fascinating part of the body. The heart is just an amazing organ, and I like the intricate nature of the surgery. I liked the fact that there was a lot of physiology involved in cardiovascular surgery, much more than other types of surgeries, because we put patients through what we call cardiopulmonary bypass. It is a bit more involved than other types of surgeries, and you get to watch how the patient's physiology changes right in front of your eyes, which is fascinating. In thoracic surgery, you can see esophageal and lung cancers, and you're able to help an entirely different patient population.

WHAT IS EXCITING TO YOU IN YOUR FIELD AT THIS MOMENT?

It's exciting to see that we're working toward surgery in a minimally invasive fashion. The fact that we can operate more safely on aging patients is amazing. For example, in the cardiac surgery realm, one of the bigger things a lot of people talk about is TAVR, or transcatheter aortic valve replacement, which repairs a valve without having to remove the old valve. This is a good option for patients who maybe are older or who have had a prior surgery and, therefore, their second surgery would be very high risk and surgery would not be an option.

In the thoracic realm, we used to take a lot of lung cancers out with a major incision called a thoracotomy. Within the last

two decades or so, we've been performing thoracoscopy, where you put a camera inside the chest and take out the cancer using smaller instruments. Now we're trying to do this robotically, which has begun to show some improvement in the visualization to help the surgeon—the picture seems to be a bit better and the incisions seem to be a bit smaller. I think being able to do the same thing in many ways is actually pretty wonderful, so that you can tailor-make the treatment for the patient.

YOU ARE BELIEVED TO BE THE ONLY FEMALE CARDIOTHORACIC SURGEON IN PITTSBURGH AND ONE OF ONLY A FEW HUNDRED ACROSS THE COUNTRY. HAS THIS DISTINCTION AFFECTED YOUR PATH TO BECOMING A SURGEON?

Many surgeons decide to specialize in cardiac or thoracic, but there aren't many of us who continue to specialize in both. I had never met any female cardiothoracic surgeons prior to my training, but I had a good mentor who introduced me to a few female surgeons in our specialty and they were huge in helping me to make a decision. I've been fortunate in that I've never felt discriminated against in any of the surgical realms, so I never felt that it was a hindrance in any way.

ARE THERE ANY COMMON MYTHS OR MISCONCEPTIONS ABOUT HEART/THORACIC DISEASES THAT YOU COME ACROSS IN YOUR FIELD?

On the cardiac side, a misconception is that heart disease affects more men, when in fact it affects more women. As a female, I've done a lot of talks to women particularly about heart disease because the symptoms present differently. Women tend to be the caregivers of the home, but many of them forget to take care of themselves. It's important for women to know the symptoms of heart disease and how they can be different in them versus their husbands, for example. A man might present more with the classic arm pain, chest pain, jaw pain, whereas women present more with fatigue, a little bit of GERD or nausea that they may think is just part of aging.

About our health in general, it's really important to modify the risk factors that get patients to a surgeon in the first place—they smoke, maybe they have diabetes or high cholesterol, or maybe their blood pressure is elevated or they might be obese. These are common risk factors that affect all arteries of the body. This is why they end up coming to a heart surgeon and needing open-heart surgery, or why they come to a vascular surgeon and need surgery because the arteries in their legs are clogged. Unless they actively take a role in changing these things, the disease is going to come back again. We try to stress that patients have to play an active role in their health. The surgeons are the last line of treatment. ■

For more information about Dr. Takahashi, visit <https://doctors.ahn.org/Mitsuko-Takahashi>.