

Just over 10 years ago,

Dr. Carolina Alba was living in Mendoza, Argentina, which is best known for its stunning mountains and world-class wine. Dr. Alba, who did her residency in the city, assumed she'd start a private cardiology practice there. Instead, in 2009, she moved to Toronto, in part to participate in a highly sought after fellowship program at the Peter Munk Cardiac Centre.

It's not easy to get into the Centre's fellowship program which accepts 75 physicians, on average, every year.

Knowing the Centre's reputation, Dr. Alba knew she would be competing against top colleagues from around the world to get in. When she received word of her acceptance, she was taken aback. "All my ideas around heart failure management would be put to the test, and I would be challenged to consider whether my approach delivers the best outcomes," she says. "I was nervous, but excited."

Dr. Alba joined a group of researchers and scientists from around the world for a one- to three-year fellowship to learn skills ranging from cardiovascular surgery and transplant to heart failure and vascular surgery. The fellows are drawn to the Centre's high number of complex cases and Toronto's diverse population, which provides unusually rich learning opportunities.

Some fellows stay at the hospital after the program is finished, while the rest take their training back home, bringing the Centre's high-quality cardiac and vascular education to patients around the world.

Competition for fellowships is stiff, says Dr. Sean Balmain, the Centre's education lead, both because of the number of applicants and the stage they're at in their careers. "The people who apply are already qualified specialists in their fields," he says. "They come to us for intensified subspecialty experience." Dr. Balmain, who was an international fellow in 2010, held a full-time faculty position in the U.K. before coming to the Centre. And luckily he did — he had to wait two years for his program to start. Similarly, some of today's programs are booked into 2022.

WORKING TOGETHER

One of the most attractive aspects of the fellowship is working with the Centre's

pre-eminent experts, says Dr. Caroline Chessex, Cardiology Fellowships Program Director. It's not something all hospitals offer. "Fellows get tremendous mentorship and encouragement to seek extra learning experiences, and to develop specific skills and research networks," she says. "It's not everywhere you can work side by side with leaders in the field."

During her fellowship, Dr. Alba studied why some patients who receive a mechanical heart develop serious complications while others don't.

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This led to further research showing that heart transplants are safe in a subset of patients with a type of high blood pressure that affects the lungs, a condition that had previously ruled out a transplant. Thanks to her work, more people are now eligible for the life-saving procedure.

Fellows are also given an opportunity to observe complex and rare heart- and vascular-related cases. For instance, the Peter Munk Cardiac Centre has one of the world's first and largest adult congenital heart disease programs. Concentrations of patients with such unique and challenging problems allow doctors to learn highly technical skills and facilitate research, says Dr. Alba.

That was certainly the case for Dr. Patrick Louie Maglaya, a cardiovascular and thoracic surgeon affiliated with the National Kidney and Transplant Institute in Manila, Philippines. At the Centre, he learned multiple techniques to repair the weakening of major arteries without cutting open the chest. "Here in the Philippines, we don't have formal training in endovascular surgery," he says. "At the Peter Munk Cardiac Centre, I learned different approaches to endovascular

aneurysm repair from giants in the field."

Another one of the Centre's strengths is that people from multiple disciplines work together as a team. The result? Patients receive more holistic care, while fellows learn from the close-knit camaraderie of coworkers. It's not uncommon for a fellow to be grappling with a rare case and need to rely on the expertise of colleagues to deliver optimal patient outcomes. "The collaborative environment is outstanding," says Dr. Alba.

GOING GLOBAL

For Drs. Maglaya and Alba, access to the latest technology and the most sophisticated therapies was what distinguished the Peter Munk Cardiac Centre from institutions in Argentina and the Philippines.

Dr. Maglaya returned to the Philippines in 2017, but he regularly stays in touch with his former mentors. "If I have a complicated case, they're just a text message away," he says. That kind of networking among the Centre's alumni also fosters cross-ocean collaborations through international, multi-centre research trials.

When her fellowship ended, Dr. Alba was tempted to go back to Argentina to work, but she decided to earn her PhD in clinical epidemiology at McMaster University and assume a second fellowship at the Centre to become a specialist in heart failure and transplant.

Hired full time in 2016, Dr. Alba focuses on prognosis research. She aims to help clinicians better identify which heart failure patients are medium-to-high risk, and consequently need the specialized care delivered at heart failure clinics, and which ones can be treated by their family doctor.

Dr. Alba still travels to Argentina every year, returning to Hospital Luis
Lagomaggiore where she trained, to meet and exchange ideas with colleagues from around the world. "Coming to the Peter Munk Cardiac Centre was a priceless opportunity," she says. "The heart failure team truly embodies the best of the best. I value feeling like I am a part of a family, where I can contribute, and where, ultimately, I have the opportunity to care for the patients who need it most."