

Making a World of Difference Through Global Health Efforts

Kara-Lee Pool, MD
Assistant Professor-in-Residence
Department of Radiological Sciences
David Geffen School of Medicine at UCLA



Among the serious obstacles to improving health care delivery in low- and middle-income countries (LMICs) is a lack of access to and expertise in radiology services. While accurate diagnosis is always crucial for effective treatment, in countries that are low on resources the need to avoid the waste of unnecessary treatments underscores the importance of diagnostic clarity. “Incorrect diagnoses lead to unnecessary treatments that not only fail to help patients, but also waste limited resources,” explains Kara-Lee Pool, MD, Assistant Professor of radiology and creator of the UCLA Radiology Residency Global Health Pathway. “There is a growing need to implement sustainable radiology services in countries that lack robust health care resources.”

UCLA Radiology has played an active role in improving radiology services in a number of countries. “Our goals include increasing capacity by expanding educational opportunities. We empower local health care workers to improve diagnostic accuracy using accessible diagnostic tools,” states Dr. Pool. “Ultrasound, X-ray, mini-PACS systems and even CT and MRI can be implemented depending on the country’s needs and resources.”

Research is an important aspect of UCLA’s global health efforts. “We try to test the way we teach; we also try to test the way we implement programs so we can continue to do better next time,” explains Dr. Pool. “UCLA shares its research with others undertaking similar work so they can replicate and even improve upon our successes.”

To achieve its aims, UCLA works on multiple levels to improve access and delivery of radiology services. Dr. Pool works with LMIC governments at the Ministry of Health level to ensure recognition of the role radiology can play. UCLA also works with large international organizations — including the World Health Organization and RAD-AID — to inform governments making important health care delivery decisions.

At the other end of the spectrum, UCLA experts work at the local level with clinics, international universities and local non-governmental organizations (NGOs) to improve radiology services.



Dr. Pool working alongside research coordinator Washifa Isaacs in South Africa.

Maintaining a focus on teaching, research, and international collaboration ensures that improvements in health care outcomes will be sustainable long after individual projects have ended.

To help UCLA radiology residents understand global health radiology needs and to enable them to apply their insights and energy to helping improve care worldwide, Dr. Pool established the UCLA Radiology Residency Global Health Pathway, a four-year residency pathway that offers advanced training in global health radiology.

The Global Health Pathway is intended to inspire residents to continue to do global health work when they graduate, but all participants benefit in ways that will help them throughout their careers. Experience in LMICs builds the residents’ problem-solving skills, and learning to have success despite limited resources benefits them whether they continue to work in LMICs or practice radiology domestically in a variety of settings. They also have the opportunity to collaborate with others from different backgrounds and specialties.

UCLA radiologists have taken part in global health projects around the world, including South Africa, Malawi, Brazil, China, Guyana and India. In Malawi, UCLA radiologists collaborated with UCLA Department of Medicine physicians to implement point-of-care ultrasound at three clinics to assist in the diagnosis of extrapulmonary tuberculosis. The program — which trained local health care providers to acquire and interpret ultrasound images — was so successful that the government of Malawi plans to implement UCLA’s training program throughout the country.

In South Africa, UCLA radiologists are collaborating with breast surgeons and breast radiologists to implement breast ultrasound in high volume surgical clinics in an effort to decrease the time to diagnosis and better triage patients to an appropriate treatment strategy.

Dr. Pool notes that much of the credit for UCLA Radiology’s successes in global health goes to the support of colleagues who believe in the mission. “We are lucky to have a large radiology faculty — from our junior faculty up to our vice-chairs and chairman— who not only support these efforts and goals, but also contribute their time and expertise to global health.” 