SCI-TECH

I'm singin' in the rain, just singin' in the rain, what a glorious feeling, I'm happy again!
SINGIN' IN THE RAIN BY GENE KELLY

Ex-National Park Service head joins environmental justice center

BY MICHELLE SO
STAFF REPORTER

A former director of the National Park Service recently joined the Yale Center for Environmental Justice, an organization which works "to remedy the key drivers of injustice."

Charles "Chuck" Sams, who was the first Native American to direct the National Park Service and did so under the Biden administration, joined the center as its inaugural director of indigenous programs.

Originally from Pendleton, Ore., Sams is an enrolled member of the Confederated Tribes of the Umatilla Indian Reservation and has both Cayuse and Walla Walla ties. He served in the U.S. Navy and was one of two Oregon representatives on the Northwest Power and Conservation Council.

School of the Environment Dean Indy Burke wrote to the News that she is "thrilled" to welcome Sams to the School of the Environment and the Center for Environmental Justice.

"Our students will benefit greatly not only from his expansive knowledge of environmental stewardship and tribal governance, but also from his experience directing a federal agency of the size and complexity of the National Park Service," Burke said.

In his new role, Sams will put together a certificate program that emphasizes "co-stewardship and co-management of public lands" by using native techniques of land management, regeneration and sustainability, he said in an interview with the News. He will also co-teach a course with an executive fellow of the center, Pat Gonzalez-Rogers, about native natural resource management and co-management of public lands.

"We're very interested in how to be stewards of public lands," Sams said. "It's an opportunity to train that next generation about how you work with Indigenous people and Indigenous communities in a way that's respectful."

Reflecting on his time as the director of the National Park Service, Sams recalled conversations with Deb Haaland, the first Native American secretary of the interior and the first Native American to sit as a cabinet member.

Sams recalled that he and Haaland both "felt the weight of" being the first Native Americans to hold their respective roles.

"We'd had elders and mentors helping us along the way. We knew that our ancestors were with us at every step," Sams said. "Yes, we were the first, but it's about the work. It's about lifting other people so that they can be seen and heard."

Haaland emphasized the importance of meeting community members where they were, Sams recalled. Haaland's engagement with the native community is what Sams and others in Washington aspired to emulate.

"We all made the same effort to try following her footsteps, to go meet people where they were at, not make them come to Washington to meet with us, though that still happened, but that is what a responsive and just government should be doing," Sams said.

At Yale, Sams hopes to instill the importance of listening to indigenous ways of knowing, acknowledging that indigenous oral histories have often predated Western scientific knowledge.

As a kid in the 1970s, Sams said he was taught in school that native people came to North America via a land bridge after the last ice age, roughly 10,000 years ago.

He said his grandfather disagreed with the narrative, insisting their people had been on the North American continent for much longer — at least 30,000 years. It wasn't until Sams became director of the National Park Service that a set of footprints was discovered, he said, dating back "to well over 28,000 years old."

"So I think if my grandfather was still alive, he would have said again, 'I don't know why they just didn't ask us,'" Sams said. "Our stories tell us we've been here for at least 30,000 years."

Indigenous knowledge, which has long been swept to the side, Sams said, could be a solution for climate resilience. For example, mudflats and cautious seasonal harvests could have prevented disasters such as the collapse of the Colorado River basin during drought times and floods around the Mississippi River, he said.

"Indigenous knowledge holds the key to solving some of our most intractable problems," YCEJ founder and professor of environmental justice Gerald Torres LAW '77 said in a July press release. "Chuck will accelerate work across Yale to mainstream that knowledge."

Sams' indigenous name, Mockingbird with Big Heart, was given to him by his maternal grandfather and articulates his life mission, he said.

Sams' perspective on life is closely tied to his views on teaching and legacy. He said he hopes that his graduate students will not remember every detail or fact he shares, but rather his passion for the work.

He envisions his students at Yale entering communities and collaborating with indigenous partners to help those communities become more resilient and adaptive to climate change.

"I learned a long time ago people may not always remember what you say, but they'll remember how you made them feel," Sams said. "I want people to know that they are important, that they are cared for and that their work will be recognized."

The Yale School of the Environment was founded in 1900.

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Yale-led program trains first interventional radiologists in Uganda

BY EDIS MESIC
STAFF REPORTER

A training program led by Yale doctor Fabian Max Laage Gaupp graduated the first interventional radiologists in Uganda.

Laage Gaupp, alongside various doctors from partner institutions, co-founded Road2IR as a nonprofit with the aim to connect volunteer interventional radiology teams with Tanzania's Muhimbili University of Health and Allied Sciences.

"Road2IR is really just a big network of faculty, nurses, technologists, medical students and residents from not only the U.S., but also Canada, Europe, Japan, other African countries that are kind of working together to advance interventional radiology," Laage Gaupp said. "Collaboration is really at the heart of everything."

According to Laage Gaupp, the organization started in 2017 as a WhatsApp group dedicated to planning the pilot training program in Tanzania.

Interventional radiology combines imaging with minimally invasive tools such as catheters and small needles to treat cancers, injuries and life-threatening diseases. These procedures — guided by X-ray, ultrasound or CT scans — are often safer and more efficient than traditional surgeries.

However, in countries like Tanzania and Uganda, where no interventional radiologists had been trained, patients could not access such life-saving procedures until Road2IR introduced its programs.

Road2IR launched its first pilot program in Tanzania before expanding to Uganda, where the program trains interventional radiologists over a two-year fellowship. Visiting teams from across the world rotate monthly to teach, supervise procedures and administer exams.

The first graduating class in Uganda consisted of three trainees: Alex Mugisha, Eva Nabawanuka and Sam Bugeza.

Mugisha first got involved with Road2IR as a fellow for the vascular and interventional radiology program at Uganda's Makerere University, in collaboration with Mulago National Referral Hospital.

"The journey has been more than amazing," Mugisha wrote to the News, reflecting upon his experiences with the program. He added that he had learned "so many different kinds of practicing from different regions of the world."

Mugisha aims to continue his involvement in the program and hopes it will reach more sub-Saharan African countries in need of interventional radiology training.



PHOTO COURTESY OF FABIAN MAX LAAGE GAUPP

Nabawanuka studied at the School of Medicine in 2011 on a student exchange program with Makerere University and upon returning to Uganda became a radiologist at Mulago National Referral Hospital.

Hoping to bring interventional radiology training to Uganda, Nabawanuka reached out to Laage Gaupp in 2020 to visit Tanzania and craft a curriculum for Uganda that built on Road2IR's work there. Twenty-four volunteer teams contributed to the training program, with one coming every month to lead training and exams.

"I mean, the impact, honestly, is big. We've seen over 2,000 consultations since we started the program," Nabawanuka said in an interview. "And those are patients. Every individual number is a patient who has been helped just because we are there. And we hope to continue helping so many more and growing the training as well."

Next year, the Road2IR program will celebrate the graduation of its next three trainees in Uganda, and Laage Gaupp believes that the program will be in good hands for years to come.

"We literally went from nothing to now being able to do almost anything that we do in the U.S. I know for a fact that we've saved and improved many lives, and that, of course, is very rewarding," Laage Gaupp said.

Laage Gaupp said he hopes the program will expand to other countries in Africa. Angola, a country of about 40 million people with no interventional radiologists, might be a potential target for starting a new program.

While Road2IR has faced challenges in the past due to the COVID-19 pandemic, equipment insufficiencies and funding shortages, Laage Gaupp is confident that the program will continue to adapt and grow moving forward.

"We'll keep doing what we're doing with the training programs that we have, and hopefully start new ones. We need people to get engaged, we need funding, and we need to build up our administrative apparatus. Ultimately, the more doctors we can train, the more patients we can help," Laage Gaupp said.

Mulago National Referral Hospital, where the program operates, is located in Kampala, the capital of Uganda.



PHOTO COURTESY OF FABIAN MAX LAAGE GAUPP

A nonprofit organization co-founded by Yale doctor Fabian Max Laage Gaupp brings interventional radiology to places with limited medical resources.

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