

STAFF

UCH Insider Central

For the Clinicians, Managers & Staff
of University of Colorado Hospital

Tyler Smith, *Editor*

Todd Neff, Joelle Klein,
Contributing Writers

Teresa Claus, *Distribution*

Taylor Carpenter, *Art Director*

Susan Follansbee, *Proofreader*

To submit story & column ideas:
Tyler Smith
(tyler.smith@uchealth.org).

UCH Insider covers clinical, business
and staff news at the hospital.
The object is to provide a credible,
accurate source for news in and
around the hospital community.

This Hospital Life

From Congo to Colorado and Back Again

It was a Friday evening, and most of the surgeons' offices up and down the fifth-floor hallway were empty and dark. [David Kuwayama](#), MD, MPA, had agreed to talk about his experience volunteering last fall with [Doctors Without Borders](#) in eastern Democratic Republic of Congo (DRC). His door had been open, and the light from the office had seemed bright in the dusk.



CU School of Medicine and UCH vascular surgeon David Kuwayama, MD, MPA, with a young patient in eastern Democratic Republic of Congo. He spent five weeks of unpaid leave doing surgeries for Doctors Without Borders there in October-November 2014.

I had been a couple of minutes early. He wore a white surgery cap with Médecins Sans Frontières embroidering, a lab coat, green scrub pants and hard-worn Dansko clogs. He had been checking out a grayscale CT scan, zooming up and down the length of a patient's abdomen, examining

cross-sections, stopping here and there for a closer look.

I had waited for my laptop to wake up and had taken in his small space: in the corner, a towering Stamina Power chin up/dip bar; on the far wall, a sizable metal yellow-diamond sign of a moose, a relic of his vascular surgery fellowship at Dartmouth; and then, on three walls, four small Médecins Sans Frontières posters push-pinned straight into the drywall at the corners. Each emphasized a different catastrophe: EPIDEMICS NATURAL DISASTERS ARMED CONFLICTS FAMINES.

Without turning from the screen on his desk, the vascular surgeon had said, "I'm gonna fix this guy with two needle pokes." Kuwayama would propose a physician-modified four-vessel endograft. He's one of the few surgeons in the United States capable of [pulling it off](#). The alternative would be opening the patient up from armpit-to-groin.

But that had been almost an hour ago, before he had talked about a journey that had taken him from a Milwaukee suburb to the country's top universities and then to some of the world's most terrible places. And now I had asked him what he had seen in the DRC, where he had spent five weeks of unpaid leave in October and November 2014. He did surgery after surgery in Rutshuru on the edge of Virunga National

Continued

Park, where Dian Fossey had once studied her gorillas, and where her fate has since been suffered by so many.

Kuwayama looked tired, which was understandable: He had returned at 1 a.m. on Monday from two weeks climbing two Ecuadoran peaks and had commenced the first of three surgeries less than seven hours later. Today, he had done a seven-hour aortic-hepatic bypass. His eyes opened a bit wider as he thought about my question. I imagined his mind's replaying of horrors no one should ever have to see.



In the OR, Kuwayama became familiar with wounds of war.

"It's just incredible what people can do to each other," he said finally.

Jesuit influence. Kuwayama's dad was a pediatrician and his mom a schoolteacher in Brookfield, Wisconsin. His interest in international affairs was no different than that of your average Midwestern kid until he enrolled at Marquette University High School. The Jesuit priests who taught there had lived in the world's poorest places. They had the kids following international news. The Rwandan genocide and the war in Bosnia were on. At one point, he was in the Amnesty International homeroom, where the boys wrote letters on behalf of political prisoners.

His teachers, he said, "demanded that you think about things happening outside our borders. I was taught at a very formative time in my life by people who had lived and breathed in these environments."

By the time he graduated, he knew he wanted to be a humanitarian surgeon.

"My dream was to go to med school, do my residency, become a surgeon, and go to work with Doctors Without Borders. I was 18." Kuwayama said. "I'm 38 now, and I'm finally doing it."

He graduated from the University of Wisconsin-Madison in 1997 and the Harvard Medical School in 2002. He landed a coveted spot in the Johns Hopkins University surgical residency program that year and spent two years in clinic and in the OR.

And then, in 2005, he went to Haiti to work at an abandoned government hospital [Partners in Health](#) had rehabilitated near the Dominican Republic border. Still a surgical resident, he limited himself to simpler procedures, he said: hernia and hydrocele and cleft-lip repairs, and adult circumcisions to reduce HIV transmission. The conditions were rough. He operated by the light of the windows, sometimes augmented with the shine of his hiking headlamp. He ate once-daily meals of rice, beans, plantains, and occasional goat meat. He bucket-showered. During that year, he performed 600 surgeries, shedding 25 pounds from an already lean 135-pound frame.

Princeton and Sudan. Kuwayama returned not to Johns Hopkins, but rather to Princeton's Woodrow Wilson School of Public and International Affairs, where he was the only physician in his Master's in Public Administration cohort. He chose to do an MPA rather than the MPH (public health) to understand big-picture how nongovernmental organizations operate and how to structure health care in difficult environments. Another aim, Kuwayama said, was to demonstrate to future colleagues and employers that "this wasn't just something I wanted to do once in a while. This was part of my mission as an academic surgeon: to incorporate global health."

For his thesis, he conceived and led a 2008 surgical-needs assessment in the Kerenek refugee camp in the western Darfur region of Sudan. He enlisted help from former U.S. Sen. Bill Frist, who was at Princeton at the time, and commissioned a DigitalGlobe satellite image of the camp. He spent a long day in a Princeton lab, geotagging each of more than 10,000 huts in the 58-megabyte image. On the ground in Sudan, he and a small team spent six weeks using handheld GPS units to guide their survey of a statistically relevant sample of the camp's 25,000 residents. (Kuwayama and CU School of Medicine surgery resident Yihan Lin, MD, recently submitted an article to the *World Journal of Surgery* documenting the method.)

The next four years – two years of surgery residency at Johns Hopkins, then two years of fellowship at Dartmouth – were about building clinical expertise. But then he wasted little time in getting back overseas. Kuwayama graduated from his fellowship on June 30, 2012; he left the next day to climb Mt. McKinley, returned to New Hampshire on July 26, and then flew in August to Africa for a six-week Doctors Without Borders stint at the Betou refugee camp in Congo-Brazzaville. The fighting there had calmed down, he said.

“I was doing C-sections – everybody there has narrow hips because they’re malnourished – appendectomies, hysterectomies, taking out tumors, and a lot of leprosy surgery,” he said. “Digits were falling off and you’d do completion amputations.”

Congo to CO. He started his faculty position at the University of Colorado in October 2012. He would have to wait two-and-a-half years for his next Doctors Without Borders mission. It took time, Kuwayama said, for the [small but growing](#) vascular surgery practice at University of Colorado Hospital to blossom to the point that it could handle his extended absence.

Even then it still wasn’t a given: [Mark Nehler](#), MD, who leads the CU School of Medicine’s Vascular Surgery section, agreed in principle, but Kuwayama’s absence from a busy practice meant that everybody else on the team would have to see more patients and take more calls. He called together vascular surgeons [Natalia Glebova](#), MD, PhD; [Omid Jazaeri](#), MD; and [Ashley Vavra](#), MD.

“We voted. Everybody said, ‘Yep, this is an important thing,’” Nehler said.

Nehler, who also directs the CU School of Medicine’s surgical residency program, was thinking bigger-picture, too. International work is a passion of young up-and-coming physicians, he said. About half of all applicants to the CU surgery residency program have done international mission work, and the interest extends to residents and faculty across specialties.

“One of the things we’re trying to do at this university is to be cutting-edge,” Nehler said. “I thought, ‘If I can make this happen, it could be a model for other departments.’”

And so, in October, Kuwayama flew to Kigali, Rwanda, traveled by road to Goma and across the DRC border to Rutshuru. Fossey’s

gorillas share Virunga National Park with all variety of guerillas and militias in constant conflict fueled by tribal rivalries, racketeering gangs, sectarian strife, and conflict minerals. It all yields a steady stream of dead and wounded. Eastern DRC is the per-capita rape capital of the world. Dozens were hacked to death with hoes, shovels, and machetes not far from the refugee camp in the days after Kuwayama’s arrival.



Kuwayama reads an X-ray through the light of a window.

Hot zone. He, a Belgian and a Congolese surgeon rotated through three shifts. There were two ORs. Kuwayama operated in one as the next patient was prepped in the other. When he wrapped one patient up, he changed and scrubbed up and went to work in the next room. He did “five major cases, like gunshots to the belly, and 20 minor cases a day,” he said.

He had seen gunshot wounds in Baltimore. But those were from “blue-light specials,” as he put it, with small entry and exit wounds. This was the first time he had seen true combat wounds of the sort meted out by high-powered AK-47s. Patients arrived with dead arms and dead legs and exit wounds the size of dessert plates, polluted with mud and mulch. Kuwayama had little opportunity, nor the precision instruments, to perform the exacting vascular-surgery procedures that are his calling card at UCH.

Worse yet, he said, was sewing up the men, women, and children who had been victimized by systematized rape that has become a standard weapon of terror in the region.

Kuwayama searched for words. “Just having to fix the worst that humans can do to each other,” he said. “That’s a rough place.”

He didn’t have time to think about it then.

Continued

“Never in anything in my life have I felt more valuable. If I just decided to leave, people would die. I can’t say that about any other situation I’ve been in,” he said.

It was an adjustment when he came back. There was “a little bit of emptiness,” he said. About what he’d seen. About “institutionalized violence of people against people for no good reason.”



Fellowship-trained vascular surgeons don’t often deliver babies, but Kuwayama took all comers – even the smallest.

Those first few days, it was hard to suit up for, say, a cosmetic varicose vein surgery.

“I could just not wrap my head around doing this to help this person’s leg look more beautiful,” he said.

That faded. But the experience helped him understand that he gravitates toward difficult, high-risk surgery to defuse aortic-artery time bombs because “It’s commensurate with what I could be doing elsewhere. I feel like I’m doing right by my patients and myself.”

His boss is behind him. Nehler says Kuwayama returned “a completely different person.”

“He’s come back very refreshed. He just needs to recharge his batteries and do this,” Nehler said.

Kuwayama hopes to be able to do it every year.

“It makes me feel like I’m achieving my life’s mission, my life’s purpose,” he said.

–Todd Neff. Neff is a regular contributor to the Insider.

To comment on this story, contact him at toddneff@comcast.net or uch-insiderfeedback@uchealth.org.

What You Read, Feb. 17

1. “APEX” Tops UCH Health Efforts to Streamline Patient Care
2. Around UCH
3. Climbing Buddies’ Friendship Extends to ORs
4. APEX Experiment Aims for Positive Disruptions
5. New Medical Staff President Ready to Serve, Eager to Talk
6. Surgeon by Day, Cowboy by Night
7. No Hype: Hypoglycemia a Hard-to Spot Danger
8. WISH Fulfilled for Expert in Burnout Avoidance
9. Dinner Shines a Light on Top Providers
10. Nurse Guides Patient on Long Day’s Journey into Night