Mody Lacour’s magic

The UCI Earth system scientist, originally from Cameroon, uses his science to ignite lights for others.

Wednesday, February 21, 2024

Lucas Van Wyk Joel
UCI Physical Sciences Communications

Mody Lacour's career in science is a reflection of the motto of the University of California: *Fiat Lux*, or "Let There Be Light."

Picture Credit:
Lucas Van Wyk Joel

Mody Ayompe Lacour performed a magic trick when he was six years old.

He took batteries, a bulb and cables, and as his siblings looked on he put them together into a flashlight and flipped the switch. Before, the flashlight would not turn on, but this time light illuminated the room and his siblings sat there stupefied.

It was a true *Fiat Lux* moment for the future UC Irvine Department of Earth System Science (ESS) researcher.

“My mom remembered me picking up batteries and cables, and using them to light up bulbs that they use in flashlights, and that would excite my siblings,” said Lacour, who’s a soft-spoken engineer originally from Cameroon. “I was always curious. I used to dismantle radios and different electronic devices. Sometimes I would fix them and sometimes I would damage them.”

But Lacour’s most ambitious magic tricks would come later in life.

Born in 1971, Lacour grew up in Cameroon’s capital, Yaoundé. He advanced rapidly through Yaoundé's primary school system, even skipping a grade. He attended secondary school and high school at the Government Bilingual High School in Buea, and it was there that his career in science took root, aided by a math teacher named Mr. Babila.

Babila performed his own genre of magic each time he stepped into the classroom – and he didn’t need batteries to do it.

“He would come to class without any notes,” Lacour recalled. “He just needed his chalk, and that was enough for him.”

Babila would talk with his students and gauge where the group’s understanding was of the topics at hand, and go from there.

“I just felt fascinated by his style,” said Lacour. “He encouraged me to get into math.”

And that’s what Lacour did. He went on to college in Nigeria to study mechanical engineering, and it was there that he learned how to use computers.

It was the late 1990s, and much of Lacour’s native Cameroon didn’t have electricity, much less computers. Knowing this, and remembering the impact mentors like his teacher Mr. Babila could have, Lacour returned to Cameroon after finishing college.

“I returned to my hometown of Nguti in the southwest province of Cameroon, and with support from my parents, George and Martha Ayompe, I set up a not-for-profit organization where I used my computer skills to teach children who were physically disabled, as well as some girls who were abandoned due to becoming pregnant, or abandoned because of other reasons,” Lacour said. “I wanted to give them a second chance and some inspiration by helping them learn how to use computers.”

The center’s name was the Freeworld Computer Training Center, and Lacour started it with just three computers that he brought home with him from Nigeria.

“During the process, I trained more than 150 youths, and some of them really excelled in their studies,” said Lacour. “Some got jobs and are still thriving in those jobs today.”

The challenges of pulling off this new magic trick were plenty. Lacour had to raise funds to pay computer instructors and other staff, fuel for the generators powering the center and for repairs of the computers. He also worked to secure support for the center from a UK-based NGO called Voluntary Service Overseas, which sent him a computer engineer named Mea Allen from the U.S. to help the center grow.

Lacour spent seven years working at the center, and at the same time he performed a separate trick: he helped erect one of the area's first cold storage centers using grant funding and an interest-free loan from the World Wildlife Fund.

“It enabled us to sell fresh livestock products on a daily basis in the community, and helped reduce the impact of hunting on the community, because people had alternative sources of protein,” said Lacour.

The work won Lacour an award for young entrepreneurs from the president of Cameroon. But even the best magic shows come to an end, for today the region where the center and cold storage facility used to be is in an active war zone, and both no longer exist.

Lacour left Cameroon in 2006 and later received his Ph.D. in civil and structural engineering from the Dublin Institute of Technology in Ireland. He focused on solar energy solutions for water heating and electricity generation before moving to the U.S. in 2015 to work as an energy auditor and quality control inspector for Howard County in Maryland, where he worked in the weatherization assistance program to help improve the energy efficiency, comfort and safety of buildings.

In 2019, Lacour came to UCI after meeting Professor Benis Egoh in ESS, who’s also from Cameroon. These days, Lacour works to understand how to make the palm oil trade in Cameroon and the rest of sub-Saharan Africa — an industry that leads to deforestation and environmental degradation — more sustainable.

It’s a complex problem. Smallholder farmers in the area are desperate, and they rely heavily on the income generated by oil palms and palm oil. But Lacour and his team urge them to understand the need to farm in a way that doesn’t yield the land barren. He works to help the smallholders understand the social, economic and environmental impacts of the palm oil trade, and he makes recommendations about how farmers can increase the profitability of their land without further damage to the environment.

For his work, Lacour featured in a documentary about the smallholder farmers called “A Smallholder’s Voice.”

Back here in California, Lacour’s helping researchers at UC Merced understand wildfire risk management in the Sierra Nevada Mountains — a region that’s becoming more and more prone to wildfires as climate change amplifies.

The common thread in Lacour’s story is a dedication to using his knowledge to help others. He does this today not just through his oil palm and wildfire research, but at UCI Physical Sciences, where he regularly attends meetings of Black in Physical Sciences (BIPS) — a group that aims to lift up the Black members of the UCI Physical Sciences community.

At BIPS, Lacour often finds himself serving as a role model for the younger members of the group, who turn to him for guidance on their research and for inspiration on succeeding as a Black scientist on multi-cultural and multi-racial teams.

Many years later, after igniting a flashlight for his siblings, Lacour is still shining a light and illuminating what’s possible for a person. What’s more magical than that?

Feature Stories
Earth System Science
Diversity, Equity and Inclusion
The Future of Energy and the Environment
Climate Change
View PDF