

Making an Impact

With help from the ACI Foundation and its supporters

By the time he was just 10 years old, Frank-Nelson Musemate already knew that his future career path would involve repairing structures in his immediate environment. “I made the choice to study civil engineering at an early age because I wanted to fix potholes, falling bridges, and collapsing houses,” he says.

Born and raised in Nairobi, Kenya, Musemate saw the impact of a failing infrastructure firsthand when a bridge close to his home collapsed, leading to loss of lives and property. He reasoned that the best way to make an impact was to pursue a civil engineering degree. “I just knew that construction was something I was passionate about, and clearly saw and understood the need for designing more reliable structures with longer lifespans,” he explains.

His journey took him to Drexel University in Philadelphia, PA. Although he was offered a place at many universities, he chose Drexel for its civil engineering program and financial assistance. To pursue his dream, he knew he needed to work quickly. In Musemate’s opinion, the best thing about the program was that he was able to complete his bachelor’s and master’s degrees at the same time. “I needed to do as much as I could in the shortest time,” he says.

From studying codes and standards in a classroom setting, Musemate knew that there were institutions that help formulate such valuable specifications. After researching many possibilities, he zeroed in on the ACI Foundation and its scholarship and fellowship program.

The ACI Foundation promotes progress, innovation, and collaboration in the concrete industry through strategic investments in research, scholarship, and ideas. Through its Scholarship Council, it supports future concrete innovators and leaders by administering fellowships and scholarships to students. The ACI Foundation, with the help of its many supporters, awards more than \$100,000 in fellowships and scholarships annually in the name of individuals, organizations, corporations, and ACI.

Musemate says that the application process was easy: “I knew that if I could just get as far as the selection committee, I would be able to show them how hard I have worked and will continue to work. I’m a person who puts everything into all I do. I set my mind to do something and I do it.”

As it turned out, Musemate did impress the selection



Frank-Nelson Musemate spoke at the ACI Convention in Québec City, QC, Canada

committee, and he was awarded the ACI Elmer Baker Fellowship for 2017-2018. This fellowship is awarded to undergraduate students entering their junior or senior year with an interest in a career in the construction industry and studying in a civil engineering, structural engineering, or construction industry management program. Baker Concrete Construction, Inc., has been supporting the ACI Foundation for 10 years through three fellowships, which have provided funding for 17 students.

“When I got the call that I had been awarded the ACI Foundation fellowship, I was very excited and received enough to pay half of my tuition, so that was a big deal for me,” he recalls.

Gaining Experience and Mentoring Others

Musemate says that the fellowship really contributed to his growth and academic advancement. “One of the requirements in the program was to do internships during my summer break, so that pushed me to go out of my way to apply for different kinds of opportunities. The companies ranged from

design companies to construction companies. I was able to visit construction sites where reinforced concrete structures were being built and got to see in person ACI specifications being implemented in a real-life setting. On the academic side, I was able to see how the ACI codes could be applied toward ensuring safe and reliable construction,” he continues.

He credits the ACI Foundation fellowship and further financial aid he received from other institutions with helping him achieve his goals. Within a 5-year time frame, he received both his bachelor’s and master’s degrees, did three 6-month internships, mentored students, and was a resident assistant at his college. “I had no free time,” Musemate says, laughing. “The ACI Foundation truly does make a difference within the concrete industry and the lives of those who receive the scholarships and fellowships.”

He shared his experiences with the students he mentored, motivating them to keep going. “I told them that when they fail, they need to pick themselves up—it’s not the end of the world. Keep on bettering yourself every day.”

One of the most important things Musemate stressed to them was that they needed to have a passion for what they do. “Being an engineer is not easy—you must like it. First reflect on yourself, then make the choice,” he advises.

Musemate notes that he was mentored in turn by many people and has positive things to say about the professors who encouraged him. What would he tell other students? “Understand yourself. Build on this—on what makes you happy. Have appreciation and passion for what you do.”

Musemate is a Bridge Engineering Specialist with STV, Philadelphia, PA. Founded more than 100 years ago, STV provides architectural, engineering, planning, environmental, and construction management services for transportation systems, infrastructure, buildings, the energy sector, and other facilities and sectors.

Currently working on an \$880 million interchange expansion project, Musemate wants to get his professional engineer license and eventually complete his PhD. “When I’m old enough, I want to give back—to be like the professors who had faith in me,” he says.

Thinking Bigger

Musemate attended his third ACI Concrete Convention and Exposition in Québec City, QC, Canada, in late March 2019, and was a speaker at the ACI Foundation’s Donor Recognition Event. Attending ACI conventions has pushed him to think bigger. “I get to engage with professionals from around the world, to learn how to build infrastructure in a better way.” He plans to get involved in ACI committees, as he would like to push for the adoption of some of the codes and standards to be worldwide. “Developing nations need to have this knowledge. I’d like to share my knowledge in the future to improve infrastructure, which in turns helps society,” he emphasizes.

When asked what he would tell someone who is thinking of applying for an ACI scholarship or fellowship through the ACI Foundation, Musemate says, “The fellowship from the



At the ACI Foundation Donor Recognition Event during the ACI Convention – Spring 2019, from left: Michael J. Paul, ACI Foundation Trustee; Musemate; and Aleksandra Radlińska, Chair, Concrete Research Council

ACI Foundation greatly contributed toward me being where I am today. The ACI Foundation’s fellowship enabled me to cover a significant portion of my college tuition, and being involved with ACI has been a really great experience. I was able to attend conventions through my fellowship, and it made me look at things from a wider and very informed perspective.”

Mustmate continues: “Whether you’re a constructor, engineer, designer, architect, or researcher, you can always find your place within ACI because it touches on everything. Going to the ACI conventions is a great networking opportunity to meet people deeply involved in the industry.”

His advice to future ACI Foundation applicants is to the point. According to Musemate, “When you apply for the fellowship, be honest and be truthful to yourself. Be upfront on why you are pursuing the degree in engineering that you are. If you’re not sure why you are doing something, then you’re not going to be 100% sure on how you will contribute to the future.”

The ACI Foundation fellowship made an impact on Musemate’s life and education. He is certain to continue making an impact on the world around him.

Thank you to all of the ACI Foundation scholarship and fellowship donors. You are not only enhancing the lives of the students who receive the funding but the world as they go on to create a brighter future for the concrete industry.

If you would also like to help make an impact and become a fellowship or scholarship sponsor, contact Jennifer DeWall at jennifer.dewall@acifoundation.org or +1.248.848.3757 or visit www.acifoundation.org.