

# Science engagement in South Africa

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Learners from grades 9 to 12 surrounded our Science Week table in the township Khayelitsha, an impoverished community near Cape Town in South Africa. We were conducting outreach for our project Cape Citizen Science (<http://citsci.co.za/>), an initiative to engage nonscientists in plant disease research in a global biodiversity hotspot. “Can plants get sick, too?” we asked, as the students examined unhealthy plants under dissecting microscopes and held petri-plates containing fungal-like organisms up toward the lights. Late in the day, a grade 10 boy named Dylan approached the table and asked about our work. His hunger to learn and the depth of his questions inspired us to invite him to our lab. He immediately responded, “Can I bring my friends?” Many researchers in our community met Dylan, Ayebonga, and Ivan during the next year, as they often joined us in our lab to satisfy their curiosity and contribute their time to the scientific process. Their dedication to learning was exemplified by the challenges they overcame to travel to our university; they often spent hours navigating the public transit system of the Western Cape Province, and occasionally faced financial barriers (although we made sure to reimburse them for their efforts).



High school students visit a lab after meeting scientists at a public engagement program.

Photo credit: AIMS-South Africa

On his first visit to the lab, Dylan excitedly informed us that it was his first time looking through a microscope. After a few visits, he told us he wants to study microbiology at university. We are grateful to know that we helped empower him to make such a critical decision. However, there are thousands of underprivileged learners in South Africa without these opportunities, whose hunger for knowledge remains unfulfilled and overlooked. We encourage researchers to participate in public engagement programs, es-

pecially in countries with emerging economies. Such programs can increase the value and capacity of research beyond science. We also encourage traditional science project leaders to open their programs to citizens, especially those without reliable access to quality science education. Together, we can help science enthusiasts (and potential future scientists) develop critical decision-making and problem-solving skills.