



Global Practicum Opportunity Form

Learn more about Emory's Global Field Experience, a fund that students can apply for to cover travel costs [here](#). More information on hosting a student is [here](#).

Please e-mail this completed form **as soon as possible (ideally before Oct 31st)** and send it back to Dr. Matthew Freeman (matthew.freeman@emory.edu) & Dr. Joanne McGriff: (joanne.a.mcgriff@emory.edu)

1. Contact (person who will review applications)
 - a. Name of organization: Sanergy
 - b. Contact Name: Lindsay Stradley & Rosemary Wali Mwalugongo
 - c. Contact Email: lindsay@saner.gy & wali.mwalugongo@saner.gy
 - d. Contact Phone: +254-788-484-300

2. Project description
 - a. Project Name: Comparative Cost Effectiveness of Sanitation Service Delivery Models
 - b. Project Description:

In Nairobi's slums, few residents have consistent access to safe sanitation, and most use unimproved pit latrines or bags inside their homes. Over seven years, Sanergy has built a network of more than 2,000 Fresh Life Toilets, providing access to safe, hygienic sanitation for 70,000 residents of Nairobi's slums. From these toilets, we safely and professionally remove, treat, and convert 20 tons of waste each day into high-value agricultural inputs.

We are proud of what we have achieved, but tons of waste remain in the community, and there are many people we do not currently reach with our Fresh Life Toilet. To capture more waste and serve more people, Sanergy's Future Initiatives team develops and tests new products and services for addition to the Fresh Life portfolio. After piloting a process to convert pit latrines into safe, aspirational Fresh Life Toilets, we have integrated this into our core operations. Today, and in summer 2019 when the Emory student would join us, we have three ongoing pilots:

- Fresh Fit: design, sales, and operations of an in-home toilet
- Mtaa Fresh: formalizing manual pit emptiers; creating safe standards for their processes; and operating a transfer station to receive their pit sludge, then removing it from the community and treating it
- Milimani Project: selling all of our services concurrently in one area, including a new subscription offering for pit latrine servicing

As we test and iterate on these offerings, we need to better understand the relative cost effectiveness of each – both separately and when offered together. We are



engaged in public-private partnership discussions with the government so that, together, we could ensure entire populations have access to safe sanitation. Understanding the cost for offering each service – or all services – is a key next step to formalizing our scalable partnership with government.

In summer 2018, an Emory Fellow supported the background research and early implementation of our Milimani Project. By summer 2019, we will have a year's data on this project, any even more data for our Fresh Fit and Mtaa Fresh projects. We are therefore looking for a fellow to analyze the cost effectiveness of these operations:

- What is the cost/person/year for each of our services, if conducted as stand-alone operations in an area?
- What is the cost/person/year for each of our services when offered in the same area? What is the weighted average cost/person/year for such an integrated model?
- As the Fresh Fit in-home toilet increases in scale and integrated operations throughout our network in early 2019, we want to explore the *marginal* cost of offering Fresh Fit, on top of our Fresh Life Toilet network.
- For the Mtaa Fresh work with pit sludge, we will have new operations on dewatering, transport, and reuse to also consider in that cost analysis.

This pilot will provide important insight upon which to base further development of each individual offering, considering how each might fit into the larger market, as well as the new offerings we need to develop in order to ensure that we are able to serve all members of the communities in which we work.

c. Project Location / Country: Nairobi, Kenya

3. Student engagement

a. Describe student role in the project:

Sanergy looks to work with Fellows who are self-directed, creative, and experts in their field, and therefore expect to define the project in collaboration with the Fellow. The Fellow would work with our Future Initiatives team to understand all current operations and operational data – and then will drive the overall structure and research of the project.

b. Expected deliverables:

- Quantitative model that documents the current cost / person / year for each model, separately and together – and that can be used to create updated cost analysis on a quarterly basis.
- Operational recommendations for how to improve cost-effectiveness of our sanitation services.



c. Specific skill requirements (qualitative, survey design, including language):

- Experience implementing new projects in a developing country context
- Familiarity with financial analysis
- Data analysis skills (+ ideally, experience creating tools for data collection and entry)
- Swahili would be helpful but not at all required
- Excitement about asking big questions and a desire to contribute to an organization's evolving strategy
- Creativity, open-mindedness, and a good sense of humor

d. Is the Project paid or unpaid? Is there any in-kind support (e.g., housing)?

The project is unpaid. Sanergy's Fellowship program provides students with support in arranging for the necessary visa, arranging for transport in-country, and identifying suitable housing during the student's stay. Sanergy also encourages all Fellows to participate in the Sanergy Speakers Series, through which they learn about social enterprise, WASH, and other work from friends of Sanergy at various organizations around Nairobi, East Africa, and beyond.

e. Timeline (students are typically available to travel to the site between May and August, but can work with the team both before and after this work): May – August, but could start remote work earlier!

4. What should students submit when applying? cover letter and CV
 - a. By when should students apply? Monday, November 12th. This should allow us to finalize on the Fellow in time to secure the proper Kenyan visa, as well as give students time to apply for Emory funding.
5. Emory University faculty contact (if any): Matt Freeman and Christine Moe.