

PRINT-Medical Students Use Innovation to Tackle Rural Health Challenges

Third year medical student Caroline Lewis still remembers what it felt like when she suffered what she thought was a life-changing injury at age 15 while playing basketball in high school. The University of Illinois College of Medicine, Peoria (UICOMP) student recalls she was depressed and really worried about her future when she tore her [ACL](#).

“The transformation that happens taking someone who’s not feeling well, who’s sick, to transforming them into someone who’s happy ... feeling better – that change is something I experienced as a patient and I wanted to do that for someone else and for other people since I experienced that first hand and that was just amazing to me,” according to Lewis.

Lewis is among twenty-nine UICOMP students accepted into a unique four-year elective track, [Innovation in Rural Global Medicine \(IRGmed\)](#) which teaches the principles of innovation, rural medical care, and how to identify health risks in a population. The third year of the program includes a two-week intensive innovation sprint in a rural community globally or within the U.S. The one-of-a-kind curriculum will help future physicians innovate and create lasting changes to improve access to health care and to create better approaches to treatment or disease prevention in rural communities.

Of the eight third year students completing their sprint this year, two students will spend time at [OSF HealthCare’s Center for Health](#) in the north central Illinois community of Streator. The others, including Lewis, will be traveling to the African country of Uganda where the World Health Organization says life expectancy last year was 63. While that number is 78 for the U.S., Dr. Sarah de Ramirez, an associate professor of Emergency Medicine and IRGMed co-director at UICOMP says challenges facing rural communities globally are much like those in rural America.

“So as we started looking at those problem statements that were surfacing from our global communities in rural areas, we realized they were so much in line here with the issues that we find that our rural communities are facing (in the United States),” according to Dr. de Ramirez.

Mental health treatment, prenatal care, and educating community health workers to support home caregivers are priorities in rural Uganda. Likewise, the Streator, IL students will tackle food insecurity, also a global priority. These similarities led the UICOMP-JUMP partnership to expand to include [Mbarara University of Science and Technology \(MUST\)](#), where there is also an existing partnership between its medical school and innovation center.

Lewis is excited she’ll be paired with another student to work on earlier intervention for depression which could include a screening tool. She knows that, as in the U.S, there is a stigma associated with mental health but she doesn’t know the extent.

“That’s one of the things we want to do when we go there is kind of get a better idea of how they view depression and mental health and ways that they’re managing it now and kind of seeing how it compares to the U.S.,” she said. She doesn’t rule out the possibility that an adaptation of an already-existing tool, such as [OSF Silver Cloud](#), might be a good solution. But, Lewis knows any solution will have to be realistic and sustainable for the rural communities in Uganda.

The IRGmed students are learning about innovation through hands-on small group sessions, simulation, online lectures lunch and learns, dinner speakers, as well as instruction from experts at OSF Innovation who work at the [Jump Trading Simulation and Education Center](#), a collaboration between OSF HealthCare and UICOMP.

Dr. de Ramirez is dually appointed at UICOMP as an associate professor and is also the vice president of Clinical Innovation at OSF HealthCare. She believes the four year IRGmed students are benefitting from a partnership between two local organizations with similar goals.

“We are all after the same challenges and being able to, in the words of the Sisters (of the Third Order of Saint Francis), to serve everyone with the greatest care and love and in the words of the university to lead collaboration to improve health.” She points out, “Those line up so congruently with the mission of this program – to be able to be humble enough to understand that our problems are so similar and so we can come together to figure out the best way to serve our communities.”

Dr. Mary Stapel, co-creator and associate director of the IRGmed program at UICOMP, said it was designed with a goal of exposing students to the role they can play in reducing health disparities whether globally or in the United States.

“Basically equipping the students in the same way for practicing in a resource-constrained area, whether that’s global or rural, and giving them a fresh vision of what it could look like to practice in a rural area -- getting them out to local, rural clinics and providing them some local opportunities to rotate in rural settings,” she explained.

Both Dr. Stapel and Dr. de Ramirez are convinced the next generation of physicians can uniquely influence future health care and create solutions to improve health equity. Additionally, Stapel said the IRGmed program supports efforts [to create a pipeline for physicians who want to practice in smaller communities](#) in Illinois and across the country.

“Hopefully they will think about rural and underserved settings as a very fulfilling and exciting place to spend their practices and their lives in the future,” she shared.

Caroline Lewis plans to return to her home state of California and do just that.

“I would like to work in a rural setting in populations that are underserved and so I think this opportunity will be amazing for me to get some work globally and in a rural setting and in mental health which is something I’m also interested in. She adds, “So, there are a lot of factors in this program that are going to build me into a stronger physician.”

As part of their immersive experience, they’ll compete “Shark Tank” style, through pitches of their innovative solutions with the winner’s solution to be created this summer in the Discovery Innovation Labs at the Jump Trading Simulation and Education Center. Dr. de Ramirez says the solution could ideally serve the needs of rural communities, both globally and locally.

Additional Background about IRGmed’s Partner University in Uganda:

This is a partnership with [Mbarara University of Science and Technology](#) in Uganda. The university has multiple partnerships across the globe and houses three innovation centers including [CAMtech](#), which is where the IRGmed students will be spending time.

“We are very excited about this partnership. We planned it together and we strive to learn and grow it together. There is no better way to tackle global challenges than through cross disciplinary collaboration across geographies.”

-Dr. Santorino Data, Lecturer Dept. of Pediatrics & Child Health, Mbarara University AND Uganda Country Manager, Consortium for Affordable Medical Technologies

Mbarara University’s Maternal Newborn and Child Health Institute (MNCHI) recently launched digital storytelling to share some of the challenges and solutions in rural healthcare in Uganda. [You can see some of those videos here.](#)