In the 13 years since the Cancer Epidemiology Education in Special Populations (CEESP) Program began in 2006, I’ve watched the program grow into a robust global network for cancer research and training. We now have over 31 strong training sites in 22 countries around the globe. Our alumni base has grown to nearly 200, and the number of CEESP mentors both at home and abroad has more than doubled.

In this issue of our newsletter, you’ll read about these and other recent developments, including our expanding network of CEESP graduates who now serve as mentors to CEESP trainees. By attending both orientation and post-training sessions for new cohorts, these mentors help to ensure that CEESP students maximize the benefits of their 15-week summer training experiences and have a clear sense of where those experiences can lead professionally. This means that both before and after their summer training experiences, CEESP students are getting advice from professionals and CEESP alumni with firsthand knowledge of the CEESP experience. Mentors like Kelly Hirko and Mario Jesus Trejo—whom you’ll read about here—provide tips on how students can conduct research projects efficiently in unfamiliar settings and can communicate effectively with cancer researchers around the world.

CEESP is expanding geographically, too. In addition to sites in Africa and the Middle East, where we’ve been training cancer epidemiologists for more than a decade, we’ve built new training sites in Cyprus, Bulgaria, Vietnam, and Argentina. Next summer we’ll launch a CEESP training site in Moldova. In every case, we work to develop sites where there is a strong infrastructure in place, so that our students have access to the data, facilities, and mentorship they need to pursue productive research and lasting experiences.

Earlier this fall, three graduates of the 2019 CEESP cohort gave presentations on their work at the International Cancer Education Conference in Salt Lake City. The students talked about lessons learned through CEESP, with a focus on how this experience differed from their previous international study experiences. Each student talked about the importance of being persistent—a key trait for anyone undertaking global cancer research. From the enthusiastic response to their presentations, it’s clear that the CEESP approach is relevant to other cancer education programs in the United States and abroad.

We’re now recruiting for the 2020 CEESP cohort—which means our reach will only continue to expand.

Amr S. Soliman, MD, PhD
CEESP Program Director
For Kelly Hirko, the “biggest thing” about CEESP was the mentorship. Hirko had just started work on her PhD in epidemiology at the University of Michigan when she traveled to Tanzania in 2009 as a CEESP student. She was, as she puts it, “a real junior.” But happily her mentor, CEESP director Amr Soliman, “had this ability to really instill confidence in me. He was able to motivate me by helping me feel capable of doing all of these things, and by really valuing my opinions and my input.”

So it’s little wonder that in 2016, when Soliman tapped Hirko—now an assistant professor at Michigan State University’s College of Human Medicine—to mentor CEESP student Abdi Gudina, Hirko said yes. She has since mentored a second CEESP trainee, Neda Kasim, and looks forward to more.

“When I mentor—and I think some of this is influenced by the mentorship I’ve had in the past—I always like to give people the opportunity to do something they’re interested in,” Hirko says. With Gudina, a first-year doctoral student in epidemiology at Kent State University, it was easy. Gudina wanted to look at racial and ethnic disparities in inflammatory breast cancer (IBC) registry data. Hirko had done related work as a CEESP student, and her PhD dissertation examined racial disparities in IBC, with an emphasis on Arab Americans in the United States.

“Tricky,” says Hirko, because Arab Americans are “typically lumped together with Caucasians, which makes it difficult to identify these individuals from the cancer registry.”

“I think my approach with students is not to tell them what to do, but to help them feel confident to do it themselves,” Hirko says of her role as a mentor. Much as Soliman did for her, Hirko strives to guide her mentees “along the way and be there to answer questions as they arise, but more than anything to help them get the confidence to feel that they can do this on their own going forward.”

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With CEESP student Neda Kasim, Hirko is investigating human papillomavirus–related cancer prevalence among Arab Americans. It’s “tricky,” says Hirko, because Arab Americans are “typically lumped together with Caucasians, which makes it difficult to identify these individuals from the cancer registry.”

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Hirko’s experience as a CEESP student shaped her career. She’s currently researching rural-urban disparities in cancer-screening behaviors in Michigan, and in a second project is looking at the efficacy of physical-activity interventions among cancer survivors in rural populations.

CEESP taught her how to be a researcher, she says. “The real boots-on-the-ground type approach to training you get from CEESP—that model is just a really great way to prepare for real-life work.” It’s also, she says, “a great way to ensure that more people are ready to do this vital research.”
As a person of Indian descent, Kieran O’Brien traveled to India often in childhood. But it was a high school visit that changed her outlook. “It really stuck with me—the reality of extreme poverty and the differences in standards of living between lower-and-middle-income countries and the U.S.,” she remembers. “It made me want to do what I could to help raise those standards.”

Fast forward a decade or so, and O’Brien, now a third-year PhD student in epidemiology at the University of California, Berkeley, with an emphasis on global health, is well on her way to realizing that goal. CEESP had everything to do with it. O’Brien spent the summer of 2011 as a CEESP trainee in Kumasi, Ghana, working with staff in the oncology department at Komfo Anokye Teaching Hospital to expand the hospital’s existing cancer registry system. By linking oncology records with surgery and pathology records, O’Brien and her colleagues were able to create a more robust system that allowed them to make rough estimates of the incidence of different cancers in the region. O’Brien later published her findings in the Journal of Registry Management.

In a second CEESP project, O’Brien interviewed traditional healers in Kumasi to determine whether increased linkages between traditional and modern systems might improve cancer management in Ghana. O’Brien published those findings in the Journal of Cancer Education.

She calls CEESP “a foundational experience that prepared me for the rest of my career.” Her first job after receiving her MPH from the University of Michigan came as a direct result of CEESP. “They wanted people who had international health research experience.” O’Brien is still in that job today, working with scientists at the University of California, San Francisco, to develop community-based interventions aimed at reducing blindness and under-five mortality in resource-limited settings, chiefly West Africa.

“What I learned through CEESP were hard and fast research skills that could translate to any other field of health research, globally and domestically,” she says. O’Brien went back to Ghana as a CEESP mentor in 2012. That’s the program in a nutshell, she believes. “It’s all about building connections.”

Lessons Learned: CEESP Trainees Share Insights

Attendees at this year’s International Cancer Education Conference in Salt Lake City got to hear from recent CEESP trainees who conducted global research projects in cancer epidemiology in the summer of 2019. The students detailed their CEESP projects and offered useful insights from their experience. Here’s a sampling:

“It’s invaluable to send students abroad. Even getting a little bit of exposure to other countries—just two to three months—changes your world view, as does learning to work with people from other backgrounds and to collaborate with people from other countries. It makes us better global citizens.” —Christina Baum, MPH student in epidemiology, University of Arizona; CEESP project: Geographic variation of pancreatic cancer in the Nile delta region, Egypt

“I’d previously been a Peace Corps health volunteer in Ethiopia, where my job was to work on HIV prevention. My job description was very vague. But as a CEESP trainee, I knew even before I went to the country exactly what kind of research I was going to do. That focus was key to collaborating with Ethiopian researchers. CEESP also taught me how to navigate local politics to obtain proper research approval.” —Breanne Lott, MPH, PhD student in health behavior health promotion, University of Arizona; CEESP project: Health providers’ awareness of cervical cancer and barriers to and facilitators of implementation of cervical screening, Ethiopia

“I was struck by how much data was missing from the medical records I looked at in Morocco. It showed me there’s a basic need for training when it comes to documenting medical information and transitioning from paper to electronic records. This is true not only of Morocco but of other middle-income countries similar to Morocco. When medical facilities go from paper to electronic records, information gets left out. There can be a lot of disparities.” —Bridget Muckian, MPH student in epidemiology, Boston University School of Public Health; CEESP project: Stage at diagnosis for aggressive and non-aggressive breast cancer at hospitals in Casablanca and Fez, Morocco

Kieran O’Brien (fourth from right) with study team colleagues in Nepal.
Mentorship Is the Core of the CEESP Experience

Mario Jesus Trejo had done Peace Corps work in El Salvador, but his CEESP training in the summer of 2017, with the Cancer Diseases Hospital in Lusaka, Zambia, was the first time he’d conducted research in a foreign setting. As a first-year PhD student in epidemiology at the University of Arizona, Trejo now works with the university’s Cancer Center to determine how selenium supplementation affects colorectal adenoma recurrence in Hispanic and non-Hispanic white populations.

Q: What was a key lesson you learned from your CEESP training?

Trejo: One of the most important things was that as an epidemiologist, you work so much with data that sometimes you forget there are people behind the data. Because I was working at the hospital, I saw a lot of patients every day. That was very eye-opening.

Q: The year after you completed your CEESP training, another CEESP student, Yuli Chen, did follow-up research in the same hospital. What was your involvement?

Trejo: The work I did in 2017 laid the foundation for Yuli’s work. I went back to Zambia the next summer and helped her settle in. Yuli Chen was able to use more of the hospital’s HIV data to take into account CD4 counts, viral load, how long people had had HIV, whether they were compliant to treatment, and other information. We’re still working on her analysis.

Q: So you were a peer mentor?

Trejo: Yes. This year—2019—we had three students from Arizona accepted into CEESP. I was able to help them develop their projects and make sure each project was something they could accomplish over the summer. After they began their training, I gave them support via email. Mentorship is what this program is about—even more so than the project you do.