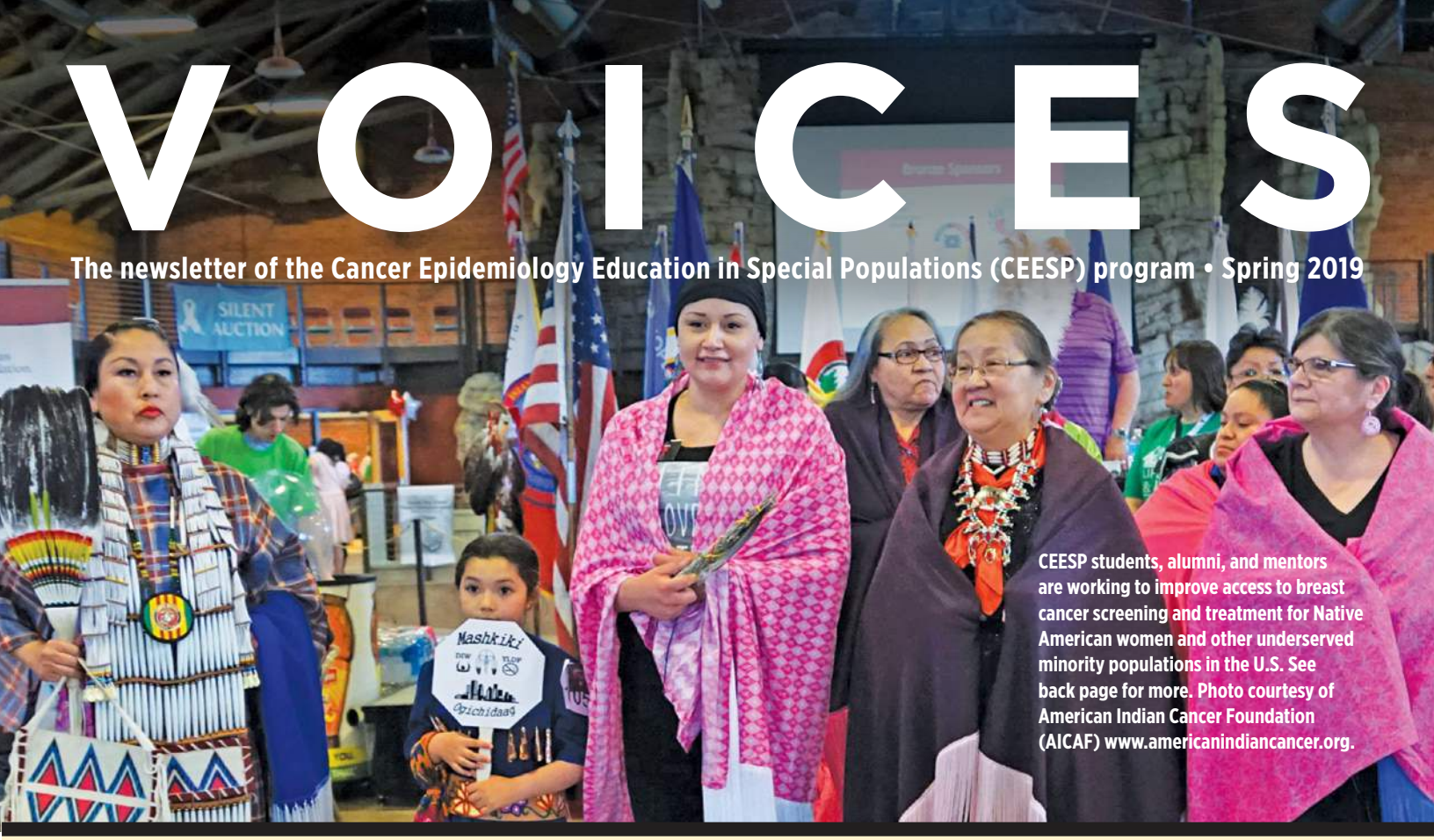
VOICES

The newsletter of the Cancer Epidemiology Education in Special Populations (CEESP) program • Spring 2019



CEESP students, alumni, and mentors are working to improve access to breast cancer screening and treatment for Native American women and other underserved minority populations in the U.S. See back page for more. Photo courtesy of American Indian Cancer Foundation (AICAF) www.americanindiancancer.org.

The Home Front

Students in the Cancer Epidemiology Education in Special Populations (CEESP) Program can choose to conduct global research in an international setting or with an underserved minority population here in the United States. Either way, they're contributing to a vital effort to expand our understanding of cancer prevention, control, and management, and they're building their experiences and careers in special populations. Those are the core aims of CEESP, and I'm very proud that we are finishing our 13th year of training cancer epidemiologists.

In this issue of our newsletter, you'll read about several CEESP alumni who are now pursuing successful cancer research with special populations in the U.S.—including African Americans, Hispanics, Native Americans, and migrant and refugee populations. Students who work domestically frequently come to CEESP with a prior interest in underserved minority populations in the U.S. It may be because they are themselves members of those populations, or because they want to build on previous research by previous CEESP graduates, or because they want to study with a particular mentor who has expertise in working with underserved minority populations in the U.S. Whatever their motivation, our students gain invaluable skills through their mentored CEESP education, research, and training.

CEESP research projects here in the U.S. focus on a broad range of topics—from epidemiologic and behavioral factors related to cancer incidence and mortality within specific ethnic or racial groups, to the efficacy of screenings and the challenges of cancer prevention in both urban and rural areas. We train students from across the U.S.—recent cohorts include trainees from Michigan, Nebraska, Ohio, Pennsylvania, Kentucky, Colorado, California, Arizona, Florida, Georgia, Missouri, New Mexico, New York, New Jersey, Maryland, Massachusetts, and Washington, D.C. Often students utilize existing data funded by the National Cancer Institute, such as the Surveillance, Epidemiology, and End Results (SEER) cancer registry. They work with mentors, both on- and off-campus, who themselves have ongoing research grants from NCI and other organizations.

As you'll see in this newsletter, some CEESP students who train in global settings also return to the U.S. to pursue domestic careers. The challenges and logistical hardships they confront in foreign settings help prepare them to work with underserved minority populations at home. Many CEESP graduates establish major careers with domestic organizations like the American Cancer Society.

As this year's CEESP cohort embarks on its summer training, I'm already imagining the future careers—at home and abroad—of these bright and talented students. Stay tuned!

Amr S. Soliman, *MD, PhD*
CEESP Program Director

About the Program

The Cancer Epidemiology Education in Special Populations (CEESP) Program includes a four-month summer field research experience in foreign countries and among minority populations in the U.S. CEESP faculty and field collaborators have the experience to provide expert field mentorship, with the aim of training participants to implement studies in ethnically diverse settings. Since its founding in 2006, CEESP has trained over 165 students who are now pursuing careers around the world.

For more visit **http://ceesp.ccny.cuny.edu.**

APPLY NOW

Application Deadline: January 10, 2020

The Cancer Epidemiology Education in Special Populations (CEESP) program is now accepting applications for the summer of 2020. The program is open to MPH and first-year PhD students in public health.

Application form and information at **https://ceesp.ccny.cuny.edu**

VOICES

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Voices is published twice a year by CEESP.

CEESP is funded by National Cancer Institute grant R25 CA112383 Cancer Epidemiology Education in Special Populations, City University of New York School of Medicine, Amr Soliman, P.I.

Send comments to **asoliman@med.cuny.edu**. Select features from *Voices* are available online at **https://ceesp.ccny.cuny.edu**. ©2019.

ALUMNI PROFILE

Stepping Stones to a Research Career

In 2007, as a first-year MPH student, **Stacey Fedewa** knew she was interested in cancer research but wasn't sure she wanted to make a career of it. "I tend to like stepping stones to see if I'm going to like something before I jump into it," she says. CEESP gave her exactly that. Fedewa spent four months in Egypt that summer tracking the incidence of bladder cancer in the Nile Delta. "It was my first time having ownership over a project like that," Fedewa says. She soon realized she loved it.

Today Fedewa is a Senior Principal Scientist in the Surveillance and Health Services Research Department of the American Cancer Society, with more than 100 peer-reviewed articles to her name, as well as multiple publications for lay readers. She studies disparities and access to cancer screening, with an emphasis on early detection. She also looks at patient utilization of cancer screening and preventive services as these relate to health policies and recommendations. Fedewa's work has been used to inform national roundtables on colorectal cancer screening, HPV vaccination, and lung cancer.

It all began with CEESP, she says. Those four months in Egypt taught her what it was really like to do research in the field. "In the classroom, you're usually handed a data set that's already cleaned, with well-defined research questions," she says. "But when you're in the field, you have to make a lot of decisions. It gave me a good outlook on what it was like to be a researcher."

It was also the first time she faced the challenges of working in an under-resourced area. At one point, she remembers, "I wanted to look at spatial patterns of bladder-cancer incidence. But I had no training in geographic information systems and no money to buy a GIS." So she went online and found free downloadable software that could do the statistical tests she needed.

After CEESP, Fedewa completed her MPH at the University of Michigan and spent four years working for the American Cancer Society before embarking on a PhD in epidemiology at Emory. Her dissertation focused on racial and ethnic disparities in colorectal cancer screening. Among her findings, Fedewa discovered that African Americans have a higher risk of interval colorectal cancer—colorectal cancers that occur after a colonoscopy—and they also have lower access to colonoscopies performed by high-quality gastroenterologists. The association doesn't fully account for the increased risk of interval cancers, Fedewa says, but clearly "more work needs to be done on the quality of colonoscopies."

Fedewa uses the lessons she learned from CEESP every day. "I work for a very large nonprofit," she says, "but I still have limited resources in some ways, and it's still a challenge to figure out how to answer your research question in the best way possible with the data you have available. A lot of it has to do with putting one foot front of the other." In other words, stepping stones. "But then you look back," Fedewa says, "and you realize you've contributed a lot to the scientific literature." ■

Fedewa (second from left) with her CEESP colleagues in Egypt in 2007
Leslie Stainton

The 2019 CEESP Cohort

This year's CEESP trainees come from seven states and nine universities, and are conducting research in 10 different sites in six countries around the world, including the United States.

Addis Ababa, Ethiopia: Black Lion Hospital
Breanne Lott (PhD student, Mel and Enid Zuckerman College of Public Health, University of Arizona): Barriers to and facilitators of cervical screening in Ethiopia

Atlanta, Georgia: Center for Family Research
Caitlin Allen (PhD student, Rollins School of Public Health, Emory University): The role of family networks and support in family cancer history collection among African Americans in Georgia

Boston, Massachusetts: Harvard T.H. Chan School of Public Health
Karina Castillo (MPH student, CUNY Graduate School of Public Health & Health Policy): Carcinogens in e-cigarettes

California: The California SEER Registry
Victoria Rodriguez (PhD student, University of California, Irvine): Social pattern of uterine cancer survivorship in multiethnic groups in SEER

Casablanca, Morocco: Hassan the Second University
Emilee Benos (MPH student, Milken Institute School of Public Health, George Washington University): Epidemiology of brain and central nervous system tumors in Morocco

Hiba Kouser (MPH student, Boston University School of Public Health): Differences in hormone receptor status in breast cancers in Morocco

Bridget Muckian (MPH student, Boston University School of Public Health): Breast cancer stages in rural and urban regions of Morocco

Dar Es Salaam, Tanzania: Ocean Road Cancer Institute (ORCI)
Darcy Cherlin (MPH student, Milken Institute School of Public Health, George Washington University): Evaluation of breast cancer referral at ORCI screening clinic

Zoe Heisler (MPH student, CUNY Graduate School of Public Health & Health Policy): Cost-benefit of breast cancer early detection at ORCI

Lindsey Mattick (MPH student, University at Buffalo School of Public Health and Health Professions): Changes in cervical cancer stage at diagnosis over a 15-year period at ORCI

Gharbiah, Egypt: The Gharbiah Cancer Society
Christina Baum (MPH student, Mel and Enid Zuckerman College of Public Health, University of Arizona): Geographic distribution in relation to pollution in Gharbiah, Egypt

Mariah Murray (MPH student, Mel and Enid Zuckerman College of Public Health, University of Arizona): Environmental exposures and hepatitis infection in the etiology of liver cancer in Gharbiah, Egypt

Mirebalais, Haiti: Zamni Lasante
Rhoda Moise (PhD student, Miller School of Medicine, University of Miami): Cervical cancer prevention and control among Haitian women

New York, New York: CUNY Graduate School of Public Health & Health Policy
Lora Kasselman (MPH student, CUNY Graduate School of Public Health & Health Policy): Associations between diet, obesity, microbiomes, and colorectal cancer risk among ethnic groups

Tampa, Florida: Moffitt Cancer Center
Aldenise Ewing (PhD student, University of South Florida College of Public Health): Cancer risk-related behaviors and screening intention among recreational-sport athletes

ALUMNI PROFILE

Amy Sedani (front, second from left) with colleagues at Chalinze Health Centre in Tanzania.

Part of a Community

Ami Sedani MPH

***Ami Sedani** graduated from the University of Nebraska Medical Center with an MPH in 2017 and is now a PhD student in epidemiology at the University of Oklahoma Health Sciences Center in Oklahoma City. As a member of the 2016 CEESP cohort, Sedani spent a summer in Tanzania evaluating the impact of newly initiated screening programs on referral rates and management of cervical cancer. The experience showed her she has a passion for cancer research. Sedani published the results of her Tanzania research in the* Journal of Global Oncology. *For her PhD dissertation, she wants to focus on lung cancer prevention in underserved populations.*

Q: What did your 2016 CEESP project in Tanzania entail?

Sedani: We looked at attendance rates at cervical cancer screening clinics in two rural areas in Tanzania, as well as attendance of women from these areas at Tanzania's main cancer treatment center. Part of our goal was to examine the impact of initiating these screening clinics. We wanted to know what referral patterns looked like and how the clinics affected treatment for patients from the two communities. This was the first time anyone had attempted to link those specific records.

Q: How did the experience help you grow as a researcher?

Sedani: I learned a lot about flexibility and going with the flow. For example, we thought before we even went to Tanzania that we had a solid idea of our research project. Within the first week we realized that was not feasible. Now

I see that although you may have a great idea, you have to be open to change once you get immersed in the work. I also learned the importance of understanding the culture of the population you're working with. You can't grasp all of the barriers just from reading the literature—you have to go to the community to really understand what's going on at every level of the social ecological model.

Q: What was the best part of CEESP?

Sedani: There were six of us in our CEESP cohort in Tanzania. At that stage of your career, you're likely still an early-career investigator. You're independent, but you have that community you can lean on if you run into issues. It made the difference. Even after the program ended, I've continued to work with others in my cohort. ■

MENTOR PROFILE

CEESP works to address health disparities in Native American populations

Marilyn Roubidoux MD, FACR

A professor of radiology in the University of Michigan's Division of Breast Imaging, ***Marilyn Roubidoux*** *says her collaborations with CEESP are a "win-win."*

Q: Why did you decide to partner with CEESP?

Roubidoux: My first collaboration was in 2011. At the time, I had a lot of data from an Indian Health Service mobile mammography unit that was operating in the Great Plains area, mainly North and South Dakota. The unit was performing mammograms with American Indian women in rural Indian Health Services clinics. It was a win-win for me to have a CEESP student conduct outcomes analysis on this data, because I didn't have funding or time to do it myself. Emily Roen, then an MPH student at the University of Michigan, collected the data and performed the statistical analysis on the mammogram reports for every one of those patients—around 2,000—and found that prior to coming to the mobile unit, the majority of these women had not had a mammogram within the recommended guideline of two years. We published these results in two papers.

Q: How else have you worked with CEESP?

Roubidoux: In 2007, CEESP student Jenna Johnson evaluated state cancer records for American Indians in Michigan and found that 80 percent of American Indian cancer patients were reported as non-Indian to the Cancer Registry. Obviously this has profound implications for cancer-incidence data and interventions. In 2017, Joel Begay, who is Navajo, helped analyze newer data from the Mobile Women's Health Unit. We're hoping to present his findings at the national radiology meeting this year.

Q: What does CEESP mean to you as a cancer researcher?

Roubidoux: I've learned a great deal from CEESP students, in particular from international research they've done on mammography practices and outcomes in other countries with underserved populations who have difficult access to mammography. ■

ALUMNI PROFILE

Aiming High

Although he comes from a Mexican-American family with deep roots in the United States, there are things **Steven Zamora** didn't know about being Hispanic. "We tend to think about Hispanics as one major group," he says. "But they're not. Cubans, for instance, have higher socioeconomic status, and their cancer outcomes more closely resemble non-hispanic white outcomes than, say, Puerto Ricans or Mexicans."

It's one of the discoveries Zamora made during his CEESP training in San Diego in 2016. Because he'd grown up and gone to school in San Diego, Zamora was able to "just jump right into" his CEESP project—using big data to try to understand cancer disparities among disparate Hispanic populations. And, he notes happily, "I got to work in community that my own family is related to."

Before he signed up for CEESP, Zamora hadn't realized that cancer is the leading cause of death in the U.S. Hispanic community, or that although cancer mortality is decreasing overall among Hispanics, the incidence of some cancers—liver and stomach, in particular—is increasing for certain groups, notably younger Puerto Ricans and Mexicans. "I hope we can figure out what is contributing to this increased risk and develop interventions to reduce it," Zamora says.

Steven Zamora and co-authors after presenting their research at the Cancer Prevention Institute of California.

In 2019, he and his colleagues published their findings from Zamora's CEESP study in *Cancer Epidemiology and Bio Prevention*. Zamora credits CEESP with enabling him to develop a deep professional relationship with his mentor, Dr. Caroline Thompson, and with his cohort. "We're still in touch," he says.

Zamora received his MPH in 2017 from San Diego State University and is now a researcher at Rady Children's Hospital in San Diego, working with data from the Pediatric Health Information System and developing new research projects. He hopes to conduct his own cancer studies eventually—perhaps as a PhD student. "By studying cancer," he says, "I know I have the potential to make a global impact." ■