Cornell Center for Health Equity

Progress Report

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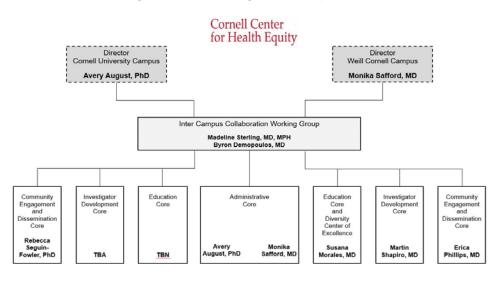


The Cornell Center for Health Equity (CCHEq) was proposed in 2016 as a Weill Cornell Center, but then Interim President Hunter Rawlings requested that the Center be elevated to a university-wide Center. Because the Center reflects the core values of Cornell University, the proposal was that a university-wide center would align with Cornell University's One Cornell strategic plans, and its activities would benefit the Southern Tier counties of New York State whose residents face significant health disparities. The Center officially launched in January 2018. This report summarizes the early activities and progress of the Center between its formal opening and June 2019.

Vision, mission, and organizational structure

The CCHEq's vision was collaboratively derived with input from scientists, educators, and community members to strive to generate new knowledge on how to achieve health equity by conducting rigorous research in partnership with the communities that Cornell University engages. A special emphasis is placed on individuals with multiple vulnerabilities to health disparities and stigmatized conditions. The fourfold mission of the CCHEq is to:

- 1. Generate new knowledge on how to provide equitable healthcare to all;
- Create a pipeline for the training of outstanding investigators focused on health equity research with a concerted effort made to engage and nurture underrepresented minority (URM) investigators;
- 3. Provide education to our students, trainees, and faculty about how to achieve health equity;
- 4. Provide service to the communities with whom Cornell is affiliated to work collaboratively toward the goal of eliminating health disparities.



The organizational structure of the Center is designed to reflect the mission and bicampus setting. Co-**Directors and Cores** are established in New York City (NYC) and on the Ithaca campus. The Co-Directors meet biweekly and the **Executive Team** comprised of the Directors and the

Core Directors meet monthly.

Challenges revolve around the leadership of the Center on the Ithaca campus. Dr. August has transitioned to the position of Vice Provost for Academic Affairs, creating the opportunity to recruit a URM faculty member to take over as the Center Co-Director and grow the Center on the Ithaca campus. Unfortunately, two promising recruitments for Center Co-Director were not successful. Additional challenges with leadership on the Ithaca campus have resulted in key leadership positions remaining unfilled. These challenges include first and foremost the lack of

teaching release to make time for the Center leadership activities, the paucity of mid-career minority faculty on the Ithaca campus, and the lack of familiarity with the community partnership model within some colleges of the University.

Strategies to mitigate these challenges include an active discussion with a very interested Ithaca faculty member about an Associate Director position paired with Dr. August. We are also exploring the possibility of senior-junior leadership partnerships in which leadership tasks are shared between a senior faculty member and a junior faculty member, with the goal of transitioning the junior faculty member into the full leadership role over time. This model would in all likelihood have senior white faculty members paired with junior URM faculty, since the latter who work in areas related to health equity are disproportionately junior on the Ithaca campus. This model would decrease the amount of time required by each individual faculty member, a critical consideration for career advancement of junior faculty and a potential strategy to overcome teaching release challenges by lessening the time requirement of the leadership position.

The leadership of the NYC campus has been solidified and Core leaders are actively engaged in Center activities as described below.

The Center currently has 78 members; 53 are academic faculty from Weill Cornell or upstate Colleges, 2 are affiliated faculty (from Hunter College and Memorial Sloan Kettering), 7 are community members, and the remainder are students.

The Center has a functioning <u>website</u> that allows interested faculty, students, and community members to join the Center online. The web site also has the capability to search the membership database to allow members to find the expertise they need to conduct rigorous research, and also to find community partners.

An <u>annual Health Equity Symposium</u> was implemented, with the first symposium taking place on March 15 and 16, 2018 in NYC. This one and one-half day symposium, which was attended by 94 people (66 from the NYC area; 28 from Ithaca campus) included remarks by keynote speaker David Satcher, MD, PhD, former US Surgeon General as well as Cornell University Leadership, President Martha Pollack, PhD, and Dean of Weill Cornell Medicine, Augustine, M.K. Choi, MD. Also featured were competitively selected abstracts and a moderated poster session. Panels on Day 2 included how to incorporate health equity into clinical research; health equity in the basic sciences; and building academic community partnership for scholarly projects. The tri-campus symposium was partially made possible by a Cross Campus Initiative award and spearheaded by Monika Safford, MD; Avery August, PhD; and Tisman-Founder's-Chair, Professor of Computer Science, and Associate Dean for Technical Programs at Cornell Tech, Deborah Estrin, PhD.

The second annual Health Equity Symposium was held on April 11 and 12, 2019 in Ithaca at the College of Veterinary Medicine. The event was attended by 50 people (34 from NYC area; 16 from the Ithaca campus). The keynote speaker was Wilma Alvarado-Little, MA, MSW, Associate Commissioner and Director of the Office of Minority Health and Health Disparities Prevention at the New York State Department of Health. A major objective of this symposium was for attendees to get to know one another and their work. Grantees presented on their progress, and the symposium included "academic speed dating" and lightning talks by Center members. Opportunities to discuss new collaborative projects were provided.

Investigator Development Core Activities and Accomplishments

The CCHEq <u>monthly seminar series</u> is fully operational, with zoom capabilities for members who wish to attend remotely. The venue alternates between campuses.

A <u>pilot grant opportunity</u> has been implemented. In spring 2018, we issued an RFA for proposals to generate pilot data for eventual future extra-mural funding. Responsive applications had to have a PI from both campuses and a community partner. A review process modeled on the NIH peer review process was used to select two projects of 6 proposals submitted. Two projects were selected and a third was supported in conjunction with the cross-campus pilot grant program led by Gary Koretzky, MD, PhD:

"Understanding the barriers to care for Blacks with symptomatic arthritis" is led by Susan Goodman, MD, of the Hospital for Special Surgery and Iris Navarro-Millan, MD, MPH of Weill Cornell Medicine with a Federally Qualified Health Center in Long Island City as the community partner. This team proposed qualitative research with minority osteoarthritis patients to elicit their perspectives on why minorities delay undergoing total knee replacement surgery.

"Evaluating the Reach Medical model of care on improving health outcomes for people who inject drugs in Ithaca, New York" was led by Czarina Behrends, PhD, MPH and Bruce Schackman, PhD, MBA of Weill Cornell Medicine and had the Reach Medical clinic in Ithaca as the community partner. This team is conducting a rigorous evaluation of the effectiveness of the novel model of care in place at the clinic with the ultimate goal of generating pilot data in preparation for a larger trial of this model to improve outcomes for people who inject drugs.

"Getting information simply and transparently (GIST) to improve end-of-life outcomes" was led by Holly Prigerson, PhD, and Paul Maciejewski, PhD of Weill Cornell Medicine. The Ithaca campus partner was Valerie Reyna, PhD of the College of Human Ecology. The project will study 100 patients with metastatic cancer and explore their "gist" understanding of their prognosis. Twenty discussions with physicians to receive test results indicating disease progression will be recorded to develop methods to identify and code "gistful" clinical interactions. The team will focus on recruiting minority patients for this study.

The 2019 pilot grant opportunity will be announced in June 2019. New this cycle will be smaller grants for scientists and scholars wishing to establish a relationship with community organizations prior to submitting a full proposal for pilot funding in the future.

Several additional <u>grants</u> were awarded to Center members as a result of Center activities in the first year and one-half of the Center's launch. These include:

Ancker J. R01LM012964. *Making numbers meaningful: promoting evidence-based communication of numbers in health.* \$2,423,500.

Chapman E. Dean's Diversity and Healthcare Disparity Research Faculty Award. *Improving colposcopy follow-up for minority women.* \$50,000.

Dell N / Sterling M. RWJ Foundation. *Exploring the potential impact of digital technological interventions to address equity and training issues faced by home health aides.* \$358,636.

Gingras L. Primary Care Innovations pilot award. A curriculum for developing teaching skills around physician-patient communication using the Patient Activated Learning System. \$25,000.

Kennel, P (IM Resident). Dean's Diversity and Healthcare Disparity Research Trainee Award. Does Polypharmacy Contribute to Socioeconomic Disparities in Heart Failure? \$10,000.

Leak T. College of Human Ecology. *The Advanced Cooking Education (ACE) 4-H After School Club: Curriculum Development and Pilot Test.* \$100,000.

Lewis N. College of Agriculture and Life Sciences. *The Patient Activated Learning System:* pilot test of acceptability and knowledge acquisition in minority patients. \$100,000.

McNairy M. R01HL143788. A longitudinal cohort study to evaluate cardiovascular risk factors and disease in Haiti. \$2,923,522.

Navarro-Millan I. Primary Care Innovations pilot award. *Racial and ethnic disparities in quality of care for disabled Americans with arthritis.* \$25,000.

Osborn J. Dean's Diversity and Healthcare Disparity Research Faculty Award. WCM catchment Prostate Cancer Health Impact Program (pCHIP). \$50,000.

Phillips E. Dean's Diversity and Healthcare Disparity Research Faculty Award. Reducing breast cancer recurrence among black women: The Breast cancer Weight Loss for Life Study (BWELL) \$50,000.

Pinheiro L. Dean's Diversity and Healthcare Disparity Research Faculty Award. *Evaluating a model to improve comorbidity management for minority cancer patients.* \$50,000.

Pinheiro L. NHLBI Diversity supplement to Kern R01. *Cancer outcomes and healthcare fragmentation.* \$360,000.

Pinheiro L. Department of Medicine Pre-K. *Disparities in the quality of cancer care.* \$200,000.

Shin J. Primary Care Innovations Program, Weill Cornell Medicine. *Experiences of sex trafficking victims in healthcare settings.* \$33,699.

Shin J. President's NYC Visioning Initiative grant. *Cornell University medical-legal partnership: enhancing care and advocacy for immigrants and asylum-seekers.* \$100,000.

Sterling M. American Heart Association Get With the Guidelines. *Trends and effect of home health care (HHC) referrals among adults discharged home after heart failure hospitalizations:* An American Heart Association (AHA) Get with the Guidelines – Heart Failure (GWTG-HF) Registry Study. \$8,000.

Sterling M. Society of General Internal Medicine. *Eliciting the perspectives of home health aides and other key stakeholders involved in home healthcare delivery for heart failure patients.* \$10,000.

Sterling M. Primary Care Innovations pilot award. *Heart failure training for home health aides in New York City.* \$25,000.

Sterling M. Engaged Cornell (Ithaca). Supporting travel to present results on community-engaged research about home health aides caring for adults with heart failure. \$5,000.

One of the goals of the CCHEq is to create an infrastructure to bring together Weill Cornell and Ithaca campus faculty for collaborative grant submissions. Weill Cornell faculty Martin Shapiro, MD, PhD, and Janey Peterson, EdD led R01 grant proposals that engaged Ithaca faculty, but which were not successful, although resubmissions are in progress. Madeline Sterling submitted a K23 proposal building on her collaborations through the CCHEq. Monika Safford responded to an RFA for a UG3/UH3 opportunity from NHLBI that brought together the Cooperative Extension, the Clinical Directors' Network, and Weill Cornell; the outcome of this submission will be announced in October 2019. Dr. Peterson is also submitting an R24 infrastructure grant with a focus on minority recruitment for trials with older adults in June 2019, and this grant engaged Ithaca faculty.

CCHEq faculty were active in publishing the results of their studies. The appendix features the 364 publications from July 2018 to the present.

An essential feature of investigator development is the training of new investigators. The Center has a special emphasis on engaging underrepresented minority investigators to consider building research careers. A new <u>fellowship</u> was created specifically for this purpose under the Diversity Center of Excellence (see below), directed by Dr. Shapiro who directed an AHRQ-funded T32 fellowship at UCLA for many years. The fellow must be from a URM group and will receive a Masters in Clinical Epidemiology from the Graduate School of Medical Sciences. The two-year program will include a mentored hands-on research training experience aiming to identify a research focus area appropriate for the development of a K award on assuming a faculty position. The first fellow was competitively selected and will begin in July 2019.

Education Core Activities and Accomplishments

The education core in Ithaca focused on establishing educational programs in health equity. Working with the Center for the Study of Inequalities, the minor in inequality studies was expanded to include a new <u>health equity track</u> that became available in the 2018-19 academic year, and a <u>minor in health equity</u> is in development.

Collaborations with the MPH program were established, engaging Weill Cornell faculty to present at the MPH program's annual Symposium. Weill Cornell faculty with expertise in bioterrorism and terrorism response were engaged to expand the MPH programming. The Cornell University MPH program has a strong focus on "planetary health", connecting humans, animals, and the environment. As such, it has a heavy emphasis on health equity and social determinants of health. Discussions were initiated in 2019 to expand this new program once fully accredited to create an MD-MPH track, which will include a focus on health equity and social determinants of health.

A long-standing collaboration with Cayuga Medical Center, which has been a teaching site for Weill Cornell medical students and trainees for many years, was expanded to support a new rural residency program that will train its first cadre of residents starting in July 2019. This program, led by Michael Berlin, MD, a graduate of Weill Cornell Medicine's Internal Medicine residency training program, has a heavy emphasis on social determinants of health and will rely on the CCHEq and MPH program for faculty mentors to provide research training experiences for the residents.

In NYC, the CCHEq became an integral part of the <u>Cornell University School of Continuing Education and Summer Sessions</u> winter course "Practice Health Equity: Theory and Fieldwork in North Brooklyn" in January 2019, and the summer course "Practicing Medicine: Health Care Culture and Careers in NYC. CCHEq faculty helped the course director to design the curriculum and assisted with finding hands-on community experiences for students.

The NYC arm of the Center's Education Core was boosted by the receipt of a 4-year \$2.7 million <u>Diversity Center of Excellence</u> grant from the Health Resources and Services Administration, led by Susana Morales, MD, as PI, and Monika Safford, MD, as co-PI. The main goal of this grant is to attract and retain under-represented minorities to the health professions. Strategies to accomplish this goal include shoring up pipeline programs starting as young as middle school and high school, counseling and mentoring at the undergraduate and medical school level, and additional programming for medical trainees and faculty. A special emphasis is being placed on Cornell University undergraduate students as well as Hunter College students.

The CCHEq took on the administration of Weill Cornell Medicine's <u>Area of Concentration (AOC) in health equity</u>. The AOC program requires medical students to spend 6 months conducting scholarly work, most often research with a scientist. With the CCHEq's leadership of the AOC, a week-long in-service was developed to prepare students to study health equity; this in-service will also be offered as an elective to medical students. The health equity in-service will be pilot tested in the 2019-2020 academic year. To date, 14 students have been mentored in health equity-related research.

In addition to the AOC, the Division of General Internal Medicine offers a <u>summer internship</u> <u>program</u> for undergraduates and rising second year medical students who want to jumpstart their AOC experience. Students are competitively selected and in 2018, we had 92 applicants for 20 spots; in 2019 we had 137 applicants for 11 spots. CCHEq scientists of the General Internal Medicine faculty participate in the program and more than half of the summer students are placed to work with them on health equity related projects. After a successful completion of the volunteer experience, students are offered a modest \$1,500 stipend through the CCHEq.

Community Engagement Core Activities and Accomplishments

The Ithaca community engagement activities were focused on establishing a collaboration between the CCHEq, the MPH program, and Cayuga Medical Center, with the result that these three entities are jointly hiring a community coordinator who will start in summer 2019. This exciting collaboration will assure that the three partners will maximize communication and synergies to achieve mutual goals of engaging community organizations with a potential role to play in overcoming social determinants of health. The CCHEq is seeking to understand community needs and cultivate potential research partners. The MPH program is seeking community organizations that would like to work with MPH students to carry out capstone projects. Cayuga Medical Center is seeking to engage community organizations that can assist their patients in overcoming social determinants of health and would be amenable to hosting residents for community-based research projects. As such, there is a great deal of overlap in these objectives, and a single person would optimize coordination of efforts and facilitate crossinstitutional collaborations.

The Ithaca campus Core Director, Rebecca Seguin, PhD (College of Agriculture and Life Sciences), will be leaving Cornell as of summer 2019 and a replacement Director is being identified.

In NYC, the CCHEq partnered with the Meyer Cancer Center to build the infrastructure that will support the Cancer Center's community-based research program in Brooklyn. The Community Engagement Core activities in Brooklyn were led by Erica Phillips, MD, MPH, and focused on engaging churches and other community organizations as well as physicians who refer to NYP/Brooklyn Methodist Hospital. A series of discussion groups were held in community settings to identify community health-related priorities, and partnering churches were identified. Community health educators were trained by CCHEq faculty and staff to deliver a lifestyle intervention program to their congregations to respond to their expressed priorities. CCHEq investigators Erica Phillips and Laura Pinheiro, PhD designed a survey to assess community needs regarding cancer screening and attitudes and beliefs about cancer and its risk factors. The survey is supported by a philanthropic gift and is being fielded in collaboration with Cornell's Institute for Social and Economic Research. It is scheduled to be completed in fall 2019 and will form the basis for developing the community-based research program for the Cancer Center as well as CCHEq investigators in other disease areas, including cardiovascular disease, nutrition, and health promotion.

A novel initiative of the CCHEq is a community engagement tool in the form of the Patient Activated Learning System (PALS). This information platform was conceptualized by Dr. Safford while she was at the University of Alabama at Birmingham and was designed to overcome profound knowledge deficits about health, diseases, and medical treatments among members of communities of color in the Southeast. The project was expanded at Weill Cornell and has engaged several CCHEq members. The site uses Adult Learning Theory and Social Cognitive Theory to provide easily understood short segments answering questions about health, disease, and treatments elicited from actual patients. It makes liberal use of videos and visual depictions of data to target populations with low health literacy. This free web-based platform has been integrated into a number of research projects, including:

Carmel A, PI (WCM). *The PALS vs. WebMD: a pilot RCT.* Funded by the Primary Care Innovation pilot program.

Chapman E, PI (WCM). *PALS to improve colposcopy follow-up in minority women.* Funded by a Dean's Diversity Award.

Goodman S, and Navarro-Millan I, PIs (WCM). *Understanding the barriers to care for Blacks with symptomatic arthritis*. Funded by a CCHEq pilot grant.

Lewis N, PI (CU). Knowledge uptake through the PALS in minority patients in a clinic in NYC. Funded by the College of Agriculture and Life Sciences.

Navarro-Millan I, PI (WCM). Peer coaching to improve cardiovascular disease risk reduction in rheumatoid arthritis. Funded by NIAMS.

Safford M, PI (WCM). The Southeastern Collaboration to Improve Blood Pressure Control. Funded by NHLBI.

Shen M, and Trevino K, PIs (WCM). *Developing video-based education about palliative care*. Funded by the Primary Care Innovation pilot program.

Sinha S, PI (WCM). What to expect that you are not expecting: videos to reduce hospital readmission. Funded by the Weill Department of Medicine Quality University program.

Sterling M. Heart failure training for home health aides in New York City. Funded by a Primary Care Innovations pilot award.

While still in development, the PALS has already engaged the worldwide community. According to Google analytics, the site has had 69,025 users who viewed 170,919 pages. Users have come from 172 countries around the world with 72.2% of users coming from the US, 10.4% from the United Kingdom, 4.2% from Canada, 2.2% from India, 2.0% from the Philippines, and 1.3% from Australia, with the remaining countries each accounting for less than 1% of users.

The PALS is being developed as a revenue stream to support CCHEq activities moving forward. Richard Feiner of Weill Cornell's Development Office has been instrumental in assisting the PALS team with developing a business model in collaboration with Steve Cohen, CFP, CPA/PFS of Gold Coast Advisory, LTD.

Summary and future directions

The CCHEq has had a substantial impact at Cornell University in a very short time. We hope to continue efforts to bring Ithaca and Weill Cornell faculty together to conduct high quality science on how to achieve health equity and to continue to build bridges between our campuses. We believe our strong push to encourage collaboration was a key to the success of CCHEq member Joe Shin's proposal that won the President's NYC Visioning grant.

Specific goals for the coming year include the solidifying of the leadership and structure of the Center on the Ithaca campus; moving forward with educational activities including the health equity minor, the MD-MPH program, and continued mentoring of medical students for their AOC experience; expanding the collaboration with the Meyer Cancer Center and community engagement activities; and training young investigators, publishing our findings in peer-reviewed journals, and submitting collaborative grants for extramural funding.