Center for Health Equity Research
California State University, Long Beach

Annual Report
July 1, 2021 to June 30, 2022

The Center for Health Equity Research (CHER or "The Center") is an academic center on the California State University, Long Beach campus focused on community-based, health equity, health disparities, and minority health research. CHER has been in existence for approximately 22 years, previously as the Center for Health Care Innovation (CHCI), and prior to that, as the Community Health and Social Epidemiology (CHASE) Programs. Over the past two decades, the Center has garnered approximately $25 million dollars in research funding. CHER was recently awarded two exploratory research grants by the National Institutes of Health and the California Tobacco-Related Disease Research Program, and its NIGM-funded CHER Institute faculty research training program was renewed for an additional five years for a total of $3.4 million in funding.

CHER was renamed and reconstituted as a center of the College of Health and Human Services in April 2014 through support from a grant from the National Institute on Minority Health and Health Disparities (NIMHD) to enhance research infrastructure and capacity at CSULB – the RIMI Project. The purpose of CHER when reconstituted was to institutionalize the progress made by RIMI and to establish a lasting hub of health equity, health disparities, and minority health research and to serve as a resource for the CSULB community. Recently, however, CHER was moved under the Department of Health Sciences as the institutional memory related to these commitments has waned.

Dr. Laura D'Anna, Associate Professor in the department of Health Science, is Center Director. In addition to generating new projects and revenue for the Center, Dr. D'Anna also serves as the principal investigator on ongoing projects, and provides direction and oversight for all Center activities. She also guides and oversees student internship experiences. Since her transition to Center Director in 2014, CHER has been awarded over $9.6 million in funding for its research and evaluation efforts.

The goals of CHER can be summarized in one sentence, which serves as the Center's tagline, *"Promoting Health Equity through Community, Collaboration, and Science."* The research conducted at CHER follows rigorous, sound scientific methods using community-based participatory research approaches, and genuine community engagement. The gold standards for research, such as experimental or quasi- experimental designs, are used as well as theory driven models for the development and testing of behavioral interventions. CHER supports research conducted by unit members, as well as collaborative community and interdisciplinary research and health equity research by affiliated faculty members. CHER also offers opportunities for student training in health equity research topics and skills through internships and student research assistant positions. Guided by its mission statement, "*To promote health equity by engaging researchers and community partners in conducting rigorous and innovative public health research*," CHER actively seeks projects that allow it to work collaboratively with community partners throughout Long Beach and the Greater Los Angeles and Orange County areas. Currently, CHER serves as the evaluators for community-based projects conducted by St. Mary Medical Center, the Long Department of Health and Human Services, and a collaborative lead by the Cambodian Association of America.

The CHER team has been active in garnering funding to support new and ongoing research-related activities, despite the extremely competitive extramural funding climate. The following pages contain information on these efforts as well as an overview of our current projects.

Center for Health Equity Research Staff

During the reporting period, the CHER team consisted of five full-time and three part-time staff members, in addition to its director. Whenever possible, CHER aims to hire qualified CSULB students and graduates in fulfillment of its aim to support students in becoming the next generation of public health leaders. During this reporting period, Miss Zina Ogunnaya resigned from her position in February 2022 to pursue higher education and Ms. Jasmine Doxey transitioned from a part-time Evaluation Assistant to a full-time Health Education/Evaluation/Outreach Specialist (HEOS) in June 2022 to provide support to our research studies and evaluation projects. Ms. Doxey is a CSULB MPH graduate who also completed her internship at CHER to meet her program requirement. In addition, a new cohort of 3-4 CSULB graduate and undergraduate students joins the team each semester and summer break to gain meaningful health research experience as part-time research assistants. Please see the table below for a list of CHER team members during this reporting period. For a list of student interns during the 2021-2022 academic year, see Section B. Student and Faculty Involvement.

Staff Member	**Position**
FULL-TIME STAFF	
Pari Sabado, PhD*	Director of Community Engagement and Evaluation
Carol Canjura*	Center Coordinator
Jeff Wood	IT/Data Manager
Jaelen Owens*	Health Education/Outreach/Intervention Specialist Coordinator
Zina Ogunnaya	Health Education/Outreach/Intervention Specialist
Jasmine Doxey*	Health Education/Evaluation/Outreach Specialist
PART-TIME STAFF	
Kyle Chang, PhD	Public Health Statistician
Wendy Nomura*	IPERT Event Coordinator; Full-time Lecturer Faculty, Health Science Department
Kevin Pinkerton	Media Production Specialist

* CSULB Alumni

I. Unit Performance and Accomplishments

A. Performance

This section gives a brief overview of the projects in the CHER portfolio. Following the overview of current projects, grant proposals prepared during the time period covered by this report are also discussed.

ACTIVE PROJECTS

Building Health Communities, Long Beach (BHCLB) Place-Based Learning and Evaluation Project
Laura D'Anna, DrPH, Subcontract PI
Lead Agency: Long Beach Forward
Funder: The California Endowment
Project Period: January 2012 – June 2022

Building Healthy Communities (BHC) was a ten-year, $1 billion place-based initiative funded by The California Endowment (TCE), designed to develop a collaborative structure with residents, community-based organizations, and government leaders to address policy issues affecting health. Central/West Long Beach was selected as one of 14 communities in California selected by TCE. The Center for Health Equity Research (CHER) served as the Learning and Evaluation (L&E) Team for BHCLB. As the L&E Team, CHER was responsible for the following activities: revised and update the evaluation plan and instruments as needed; conducted surveys with adult residents; analyzed and disseminated BHCLB data and findings; attended BHCLB-related meetings; participated in training and technical assistance about evaluation and learning; determined evaluation training needs; coordinated support for evaluation trainings; provided ongoing feedback to BHCLB about evaluation and learning findings; and worked with BHCLB staff to interpret findings. As part of the initiative's cross-site evaluation, CHER also participated in cross-site learning and evaluation activities, including attendance at cross-site convenings, participation in one or more of the learning subcommittees on the development of cross-site tools and methods, and related data collection activities. Notable activities conducted during this reporting period include:

<u>Power Building Case Study and Webinar:</u>

- As previously reported, CHER developed a case study in collaboration with Long Beach Forward to examine resident power building in Long Beach. The case study was finalized and printed on July 21, 2021, and is available in English, Spanish, and Khmer.
- Dr. Parichart Sabado, CHER Director of Community Engagement & Evaluation, worked in collaboration with the Long Beach Forward leadership team from November 2021 to April 2022 to plan a virtual webinar on Building Community Power in Long Beach. The purpose of the webinar was to highlight power building activities within BHCLB over the past 10 years and to discuss key accomplishments (e.g., policy wins) that resulted from these activities. The webinar was held on April 12, 2022 and April 20, 2022, during which Dr. Sabado presented the power building case study to community stakeholders.

<u>Data Dashboard:</u>

- CHER IT/Data Manager, Mr. Jefferson Wood, developed a data dashboard for the Resident Power Survey. The survey was developed to assess residents' level of **engagement** in BHCLB and changes in their **leadership** skills and in their perception of their ability to **influence** change. These three elements are viewed by BHCLB partners as the core ingredients of resident power and are necessary for power to be constructed and deployed. The Resident Power Survey was

administered in 2013, 2015, and 2018 to a total of 443 Long Beach residents who were directly involved with the initiative via its many campaigns and coalitions, or indirectly involved via its 50+ community partners. Using the dashboard, BHCLB partners and allies can access data from the Resident Power Survey for reports, grant proposal development, and presentations to elected officials to support their community change activities.

Just Environment Long Beach - Research & Evaluation Support:

- Despite our BHCLB evaluation grant coming to an end in June 2022, Dr. Sabado continues to provide ongoing research and evaluation support to the Just Environment Long Beach (JELB) coalition, originally the BHCLB Environmental Health Workgroup. JELB is a collaborative of organizations and individuals working to achieve systemic changes on matters of environmental health and justice in the most affected neighborhoods of North, West, and Central Long Beach. During this reporting period, Dr. Sabado trained a subset of four JELB members and two CHER interns on qualitative data analysis using Dedoose, a web-based data analysis software. Data were collected from 18 focus groups with residents in Central, West, and North Long Beach. Focus groups were held to delve deeper into community survey findings and to learn what residents would like to see changed in their communities, and who they believed should be part of the change. Findings from the focus groups will be used to inform policy development as part of JELB's work plan. In addition to facilitating the training on qualitative data analysis, Dr. Sabado also assisted with qualitative data analysis and developed a presentation to report back focus group findings to the community.

Community Wellness Program Evaluation, Laura D'Anna, DrPH, Subcontract PI
Lead Agency: Cambodian Association of America, Kimthai Kuoch, PI
Funder: California Department of Public Health, Office of Health Equity
Project Period: January 2017 – April 2022, Extended through April 2026

The Community Wellness Program (CWP) is one of 35 projects under the California Reducing Disparities Project (CRDP) funded by the California Department of Public Health. It is the first program of its kind that seeks to demonstrate the effectiveness of culture-specific outreach techniques and intervention activities centered on shifting cultural norms about mental illness. The CWP is a collaborative of five Cambodian-serving organizations that are jointly implementing program activities to promote mental wellness among Cambodians. The organizations include Cambodian Association of America (CAA – Lead Agency), Families in Good Health (FiGH), Khmer Parent Association (KPA), The Cambodian Family (TCF), and United Cambodian Community (UCC). CAA, FiGH, TCF, and UCC work collaboratively to implement project activities, while KPA assists with outreach and recruitment only.

Since the last report, all in-person program and data collection activities have resumed, but some activities are still delivered online per participants' request[1].

During the past 4 years, CHER served as the local evaluation team for the CWP, while assisting with statewide data collection activities. As the local evaluation team, CHER conducted evaluation activities specific to the CWP to generate data to contribute to the body of research on mental health among Cambodians.

[1] While, the CWP grant period ended in April 2022, the California-reducing Disparities Project received additional funding to extend all 35 projects through April 2026.

CWP Extension

- During this reporting period, the California-reducing Disparities Project (CRDP) received $63.1 million in additional funding as a result of advocacy that was spearheaded by the CRDP Sustainability Committee. The additional funding extends all 35 projects, including the CWP, through April 2026.
- The CWP team took this opportunity to make changes to the program design.
- As part of the extension, Dr. Sabado met with CWP partners to discuss the successes and challenges of the previous iteration, and the ways in which the evaluation can be streamlined to lessen the burden of data collection on partners.

CWP Database

- We previously reported that CHER developed a data entry portal (the CWP database) to collect and manage process level data. CHWs continue to use CWP database and it has proven to be extremely helpful in alleviating the need for CHWs to regularly provide process level data for multiple reports. CHER provides ongoing technical assistance to CHWs and trains new staff on how to enter and query data.

Asian Pacific Islander Regional Network to Reduce Tobacco-Related Disparities Evaluation
Laura D'Anna, DrPH, Subcontract PI
Lead Agency: St. Mary Medical Center, Families in Good Health
Funder: California Department of Public Health, Tobacco Control Program
Project Period: May 2018 – April 2023

CHER was selected to lead local evaluation efforts for the Asian Pacific Islander (API) Regional Network to Reduce Tobacco-Related Disparities funded by the California Department of Public Health California Tobacco Control Program. The API Regional Network to Reduce Tobacco-Related Disparities has identified three objectives for its tobacco control work: 1) By April 2023, Lomita and Rosemead will adopt and implement a policy designating all outdoor dining areas, including patios and balconies, as smoke-free; 2) By April 2023, Gardena and El Segundo will adopt and implement a policy designating 100% of individual units (including balconies and patios) in multi-unit housing (MUH) complexes (with two or more attached units) and areas at least 30 feet from doors, windows, patios, and balconies, as smoke-free; and 3) Convene an API Youth Coalition of approximately 10-15 youth members between the ages of 14-19 years to engage in tobacco control work, including, but not limited to, increasing community awareness of tobacco use, policy advocacy, and data collection.

As the local evaluation team, CHER staff is responsible for developing an evaluation plan and data collection instruments, and overseeing evaluation activities for the Network. The following evaluation activities were completed during this reporting period:

Street Intercept and Door-to-Door Surveys

- Since the last reporting period, 100 additional surveys have been collected in Lomita, CA for a total of 150 surveys. The purpose of the survey is to learn about diners' experience with secondhand smoke exposure while dining outdoors, and to assess their support of a policy that would prohibit smoking in outdoor dining areas, such as patios and balconies.
- An additional 67 surveys on smoke-free multi-unit housing (MUH) have been collected in El Segundo, bringing the total to 150 surveys. The purpose of the smoke-free MUH survey is to learn about existing smoke-free policies at their complex, about tenants' experience with drifting

smoke, and about their thoughts on policies that would restrict smoking in common areas, on balconies and patios, and in individual units.

Both the street intercept survey and door-to-door survey were administered by trained members of the API Youth Coalition. Survey data were entered and analyzed by CHER student interns.

Key Informant Interviews

- One key informant interview was conducted on April 28, 2022 with a property manager in El Segundo. The purpose of the interview is to learn about existing (voluntary) smoke-free policies and support of a city-wide policy that would prohibit smoking in common areas and individual units.
- Two key informant interviews were conducted with city leaders during this reporting period.

Consumer Feedback Focus Group

- Dr. Sabado facilitated a focus group on December 14, 2021 to ask participants for feedback on a PSA that was developed to increase community awareness of the dangers of secondhand smoke.

Youth Training

- Dr. Sabado conducted a 2-day virtual training workshop on Human Subjects Research for new members of the API Youth Coalition. The CIRTification training has been approved by the CSULB IRB as a community-friendly alternative to the online CITI training. The trainings were held on August 19 and 26, 2021.

As previously reported, all in-person data collection activities have resumed with COVID-19 safety precautions in place. Data collection activities are conducted outdoors and individuals assisting with data collection are advised to wear a face covering and to maintain physical distancing. Focus groups and interviews continue to be conducted via Zoom.

***My Sister's Keeper* Program - Evaluation Project**
Laura D'Anna, DrPH, Subcontract PI
Lead Agency: City of Long Beach Department of Health and Human Services
Funder: U.S. Department of Justice, Office for Victims of Crime
Project Period: September 2019 – December 2021; no-cost extension through September 2022

CHER was selected by the Long Beach Department of Health and Human Services (LBDHHS) to serve as the evaluator for the 3-year, *My Sister's Keeper (MSK)* Program, a Specialized Services Program Serving Victims of Human Trafficking funded by the U.S. Department of Justice, Office for Victims of Crime (DOJ/OVC). The evaluation team also reviews and synthesizes data gleaned from partner reports to track performance measures, and attends partner meetings to document challenges and barriers to service delivery. Deliverables for the evaluation include data from evaluation activities, presentation of findings to LBDHHS and partner agencies, and completion of the final evaluation report.

Since the last report, all MSK workshops continue to be delivered virtually via Zoom and data collection activities (surveys and interviews) have been completed online via an online survey and Zoom. Though CHER's evaluation subcontract ended in December 2021, CHER was able to continue evaluation activities for a period of 9 months (January 2022 through September 2022) with additional funding through a no-cost extension of the prime contract.

Peer Promotion of Wellness and Enhanced Linkage to Resources – 2 (PPOWER^2) Project - Tobacco and Cannabis Intervention for Young Black MSM
Laura D'Anna, DrPH, PI
Funder: Tobacco-Related Disease Research Program, University of California Office of the President
Project Period: July 2018 – March 2022

Funded by the Tobacco-Related Disease Research Program (TRDRP), the PPOWER^2 study drew upon established community-based partnerships and the work achieved with the first PPOWER Project which was completed in March 2019. To address TRDRP's tobacco-related health disparities research priority, the study tested a tobacco/nicotine and cannabis intervention tailored to young Black men (YBM), who report infrequent smoking of tobacco or marijuana, any vaping of tobacco/nicotine (or non-nicotine products), and any cannabis use edibles, or any combinations of these. Primary prevention approaches were designed to avoid initiation of tobacco/nicotine and cannabis use for YBM who report never having used any of the above substances. The secondary prevention approaches were designed to prevent early or infrequent users from transitioning to frequent users. The study involved two phases which consisted of formative data collection, intervention development, and a feasibility pilot (Phase I), followed by an intervention testing phase (Phase 2). Initially scheduled to end in June 2021, a 9-month no cost extension was submitted and approved, with a final end date of March 30, 2022. Due to recruitment challenges as a result of the COVID-19 pandemic, the additional time was needed to continue participant enrollment and complete data collection activities. In support of projects requiring additional time to meet goals and objectives, TRDRP awarded CHER a $125,000 administrative supplement to provide staff support during the no cost extension period.

Activities for the project during the no cost extension were focused on the enrollment of intervention testing phase participants, the completion of remaining data collection activities (3- and 6-month follow-up surveys) and data analysis. A total of 206 participants were enrolled. A behavioral questionnaire was administered online at baseline, 3-month, and 6-month follow up. Follow up rates were 75.7% at 3-month and 73.3% at 6-months.

Based on the work and preliminary data from this study, a proposal to explore collateral tobacco exposure among young Black men (YBM) was submitted to the Tobacco-Related Disease Research Program in November 2021 (See Funded Proposals) and subsequently funded.

Exploratory Interviews: Are blunts and spliffs the new menthol? Exploring the potential role for marijuana to increase health disparities within the Black community
Laura D'Anna, DrPH, PI
Funder: CSULB College of Health and Human Services, Research, Scholarly and Creative Activity (RSCA) Grant
Project period: Fall 2021 – Summer 2022

As a faculty member in the health science department, Dr. Laura D'Anna, CHER Director, was awarded a RSCA grant to conduct qualitative research with young Black and Latinx men to explore knowledge, beliefs and attitudes about the risks associated with the co-use of marijuana and tobacco, a behavior which has the potential to lead to nicotine dependence. Project activities included the conduct of in-depth, individual interviews with up to 20 Black and Latinx men, ages 18-34, living in Los Angeles County who report co-use of tobacco and marijuana in the past three months. Interview findings will be used to inform future research. (See Proposal Submissions, one study was subsequently funded.) During this reporting period, data collection instruments and protocol were developed and submitted for IRB approval in

November 2021 with final approval granted in December. Eight individual interviews were conducted by June 30, 2022 with an additional 12 interviews completed over the summer. As of this writing, qualitative data analysis of the interview transcripts using NVIVO software is ongoing with assistance from a health science student intern.

Investigating the Potential for Non-Tobacco Wraps to Displace Cigarillos for Blunt Smoking
Laura D'Anna, DrPH, Subcontract PI
Lead Agency: University of California, Irvine, David Timberlake, PhD (PI)
Funder: Tobacco-Related Disease Program Pilot Award, University of Southern California Office of the President
Project Period: July 2021 – June 2022

Dr. Laura D'Anna, CHER Director, served as a Co-Investigator on a grant awarded to Dr. David Timberlake, Professor at the University of California, Irvine, under the Tobacco-Related Disease Research Program Pilot Award funding mechanism. Dr. Timberlake's proposal, entitled *Investigating the Potential for Non-Tobacco Wraps to Displace Cigarillos for Blunt Smoking,* is an exploratory study of cannabis use, specifically blunt use (rolled cannabis in tobacco leaf), among African-American adults in order to identify acceptable non-tobacco leaf alternatives and reduce exposure to tobacco. Dr. D'Anna advised on effective community engagement and outreach strategies, and assisted Dr. Timberlake and his research team with optimal strategies for data collection using virtual methods.

CHER Institute - Innovative Programs to Enhance Research Training (IPERT) (September 2016 – August 2022)
Funder: National Institute for General Medical Sciences (NIGMS)/National Institutes of Health

Previously scheduled to end in August 2021, CHER received a no cost extension (with sufficient carry forward) to complete an additional year of IPERT programming during this reporting period. In addition, CHER was successful with its application to renew the CHER Institute for an additional five years (now CHER Institute II in its second iteration). See section on Funded Proposal Submissions.

The goal of the CHER Institute at California State University, Long Beach is to provide educational experiences to enhance the readiness of early career faculty at minority serving institutions (MSIs) to conduct community-based, social and health behavior research to achieve health equity among racial/ethnic minority populations, and to increase the number of scientists from MSIs represented among National Institutes of Health (NIH)-funded investigators. Funded by the National Institute of General Medical Sciences (NIGMS), the CHER Institute features (1) the CHER Institute training program, an annual, in-person, six-day, intensive research training and mentoring experiences for early career faculty on theory-based, culture-informed methods for effective community engagement in health equity research with the purpose of developing an NIH research application, and (2) single topic webinars held four times annually for interested faculty across the U.S. on theory-based, culture-informed methods for effective community engagement in health equity research. Faculty at sister MSIs across the U.S. are given priority for participation in the CHER Institute training program, but interested faculty from other institutions may also apply. Outreach for the research webinars is focused on MSI campuses and affiliated networks.

<u>CHER Institute Training Program</u>
As in previous years since the onset of the COVID-19 pandemic, the annual, six-day CHER Institute was held as a virtual training program via Zoom videoconference on June 6-11, 2022. Fourteen early career

faculty members were accepted into the CHER Institute as Faculty Fellows (See table 1 on the following page). Since its award in September 2016, CHER has held six CHER Institute training programs with a total of 90 faculty participants, including nine faculty from the CSULB College of Health and Human Services.

The summer CHER Institute training program consisted of five and a half days of online programming. To facilitate the virtual program, the CSULB BeachBoard was utilized as a central location to access program materials and Zoom links for the daily sessions. Daily activities included a plenary session, "science chats", seminars, and time was allotted at the end of the day for individual and group assignments. In addition to facilitating plenary sessions, science chats and seminars, Institute faculty mentors (seasoned researchers from other Institutions) met individually with participants each day to provide guidance on the formulation of their research and a 3-year research career development plan. (See table 5 under Academic and Community Collaborations for a list of our CHER Institute faculty mentors.) A two-hour Institute Faculty Fellow Alumni "Research Spotlight" was held on Friday, June 10 to highlight the accomplishments of past CHER Institute participants, which also included attendance by Faculty Fellows from previous CHER Institute cohorts.

Table 1: 2022 CHER Institute Faculty Fellows

CHER Institute Faculty Fellow	**Institution**
Wallis Adams, PhD, MPH	California State University, East Bay
Danielle Dickens, PhD, MS	Spellman College
Lizbeth Gaona, PhD, LCSW	California Baptist University
Alexis Jemal, PhD, MSW, LCSW, LCADC, JD	Hunter College
Katina Lang-Lindsey, PhD, LMSW	Alabama A&M University
Kimberly Lawrence, PhD,	Virginia State University
Nicole Mahrer, PhD	University of La Verne
Lohuwa Mamudu, PhD, MSc	California State University, Fullerton
Tamara Nelson, PhD, MPH	Rutgers University – Camden
Areen Omary, PhD, LMSW	West Texas A&M University
Zubaida Qamar, PhD, RDN	San Francisco State University
Tamara Savage, PhD, MSW	University of North Carolina Pembroke
Christian Vazquez, PhD, MSW	The University of Texas at Arlington
Jia Wu, PhD, CRC, LPC	Northeastern Illinois University

An online evaluation of the CHER Institute was conducted daily and immediately after the full week of Institute activities. Feedback and comments from participants were overwhelmingly positive. The following are selected quotes taken from the open-ended portion of the overall evaluation survey:

- *Before CHER I lacked the confidence that I could actually engage in research as a PI*
- *I took away that it is okay to ask many questions; I felt validated that others may also have similar questions and asking for help is part of the process*

- *The prof dev plan being 2 years out gives me permission to be patient and think long term (crock pot- not microwave)*
- *Thank you so much for the invaluable training. I really appreciate this institute and all of the information ascertained and lessons learned!*
- *Thank you so much for this opportunity. It exceeded my expectations and I am glad to have been a part of this Institute.*
- *I would recommend future fellows to take full advantage of this opportunity and to rely on and utilize the community that is developed through this Institute.*
- *The training is intense but definitely worth it!! You will learn not only about the NIH grant process, but you will grow as a researcher and a scholar.*

CHER Institute Webinars

In addition to the CHER Institute training program, four webinars for early career faculty were held during the 2021-20221 academic year (see Table 2 for webinar information). Topics for the CHER Institute webinars focused on 1) funding mechanisms and research support for early career faculty, and 2) emerging research methodologies for faculty. Together, there were a total of 222 registrants for the four webinars, and 105 individual logins.

Table 2. 2021-2022 Webinar Topics and Presenters

Date	**Webinar Topic**	**Presenter**
2021 FALL SEMESTER		
Oct. 28, 2021	*Transforming Clinical or Community-Based Research Approaches to Improve the Health of People of Color*	**Lisa Bowleg, PhD, MA** Professor, Applied Social Psychology Director, DC CFAR Social and Behavioral Sciences, George Washington University
Nov. 11, 2021	*The Use of Social Media to Recruit during the COVID Pandemic*	**Tiffany Daniel Pineda** Research Navigator Clinical and Translational Science Institute Chair, CTSI Diversity and Cultural Competence Council University of Florida
2022 SPRING SEMESTER		
March 24, 2022	*Writing the Quantitative Data Analysis Section for an NIH Proposal*	**Yan Wang, DrPH, MS** Associate Professor, Prevention and Community Health Milken Institute School of Public Health George Washington University
April 7, 2022	*Alternative Ways to Get Involved with Conducting NIH Research*	**Sheldon Fields, PhD, RN, CRNP, FNP-BC, AACRN, FAANP, FNAP, FAAN** Associate Dean for Equity and Inclusion | Research Professor, Ross and Carol Nese College of Nursing, The Pennsylvania State University

Annual CHER Institute Follow Up Survey

A link to a web-based survey was emailed to the 76 early career faculty who participated in our previous four annual CHER Institutes. Overall, the majority of Institute faculty fellows reported continued confidence in their progress towards the completion of their career and research development goals, and their ability to address barriers and challenges to obtain support for their research portfolios. Respondents also reported they received new ideas about how to pursue and enhance their research endeavors since their participation in the CHER Institute. A large majority also reported that they felt they made lasting connections in the field of health equity research through the CHER Institute.

CHER Institute Wiki

In support of the CHER Institute's goal to provide continuing support and resource access to institute alumni, CHER staff have established a private wiki-style information store. The CHER Institute Wiki is constructed using MediaWiki, a widely-used open-source content-creation tool which serves as the basis for Wikipedia.org and many similar sites. This web-accessible information store is housed alongside the CSULB CHER Website on servers provide by CSULB. The Wiki is access controlled and available to fellows and mentors of the CHER Institute and CHER Staff. Content includes details and video recording from the summer CHER institute and CHER Institute Webinars, along with other research support resources developed during the past four years of the summer institutes, profiles of the fellows and mentors, and collaboration opportunities.

FUNDED PROPOSALS DURING THE REPORTING PERIOD

OCTOBER 2021

IPERT – CHER Institute II (Laura D'Anna, Principal Investigator; Alex Washington, Co-Investigator)
Funder: National Institute of General Medical Sciences, NIH, PAR-21-196, Innovative Programs to Enhance Research Training (IPERT) (R25), July 2022 – June 2027

An application was submitted to the National Institute of General Medical Sciences (NIGMS) to renew CHER's previously funded IPERT grant for an additional five years to provide educational and mentored activities to enhance the readiness of diverse early career faculty at minority serving institutions (MSIs) to conduct community engaged biomedical research designed to promote health equity. CHER Institute II builds on the lessons learned, experiences, and accomplishments garnered by the original CHER Institute (2016 – 2022), with the inclusion of a wider range of biomedical scientists, enhancements to mentor training and mentoring components, and additional funding to support proposal development among select Institute participants. The CHER Institute II will feature: 1) A six-day, individual and group intensive experience focused on effective community engaged biomedical research to support participants in the development of a specific aims page for an NIH proposal, and either an outline of a manuscript for peer-review or the approach section for an NIH proposal; 2) Regular, mentored support between CHER Institute faculty mentors and graduated faculty fellows for up to 12 months following the institute; 3) A highly focused, virtual writing retreat to continue to develop skills/capacity among alumni who are preparing a submission (or resubmission) of an NIH grant proposal to include mentoring for up to 6 months, support for one course buyout or the equivalent, and a peer review prior to submission of their proposal; 4) Webinars (2 per semester) for 100 early career faculty (including mentored faculty fellows) annually on theory-based, culturally informed methods and skills development for community-engaged biomedical research. Institute participants will be recruited from MSI campuses and affiliated networks using CHER's database developed during the first CHER Institute, and through the partnerships established with CHER Institute faculty mentors and alumni. Faculty at sister MSIs across the U.S. will be given priority, but interested faculty from other institutions who are working in the area of community-engaged health equity biomedical research may also apply.

NOVEMBER 2021

Is marijuana the new menthol? Can marijuana use among YBM serve as a hook for nicotine addiction? (Laura D'Anna, Principal Investigator; Raina Pang, University of Southern California, Study Advisor)
Funder: Tobacco-Related Disease Research Program (TRDRP), The Regents of the University of California, Office of the President, High Impact Pilot Award, July 2022 – June 2024

Building on our recent TRDRP-funded work with young Black men (YBM), our research team proposed a mixed methods approach to explore nicotine exposure resulting from the mixture of tobacco and marijuana which typifies certain marijuana use modalities (hereafter referred to as "collateral" tobacco/nicotine exposure), and to assess the levels of risk awareness present among marijuana-using YBM. The study will: 1) provide empirical data required to aid in elaborating a grounded theoretical understanding of how certain marijuana use methods may influence the potential for subsequent nicotine addiction, 2) elucidate the risks associated with various types of marijuana use and mulling behaviors, and 3) provide insights for developing nicotine reduction strategies in future harm-reduction oriented interventions.

MARCH 2022

Implementing a Community-engaged Equity Approach to Explore Barriers and Community Assets to Improve the PrEP Care Continuum in Long Beach, CA for Black and Latinx SGM Individuals
(Laura D'Anna, Principal Investigator; Everardo Alvizo, Long Beach Department of Health and Human Services, Principal Investigator; Nina Harawa, UCLA, Co-Investigator)
Lead Agency: UCLA-Charles Drew University Center for AIDS Research (UCLA-CDU CFAR)
Funder: NIH Ending the HIV Epidemic Supplement Award, July 2022 – June 2024

This proposal was included in an application by the UCLA-CDU CFAR for supplemental support to fund multiple projects for research to support the objectives of the *Ending the HIV Epidemic* (EHE) national initiative. We proposed a mixed-method study guided by the EPIS implementation science framework in response to the EHE topic *#2 Equity-focused approaches to reduce HIV-related health disparities*. Our research team engaged in an equity-focused approach to identifying pre-exposure prophylaxis (PrEP)-related needs through meaningful partnerships with the community; the Long Beach Comprehensive HIV Planning Group (HPG)'s PrEP and Trans Wellness Workgroups including individuals affected by HIV. The study will address the following *three research questions: 1) What are the experiences and perceived barriers resulting in low PrEP engagement along the care continuum for Black and Latino men who have sex with men (BLMSM) and transwomen in Long Beach; 2) Among existing and potential PrEP providers, what are the gaps and feasibility of providing culturally tailored PrEP-related services; And, 3) How can the barriers be addressed effectively?*

OTHER PROPOSAL SUBMISSIONS DURING THE FUNDING PERIOD

JULY 2021

Project ASSIST (Access and Social Support Intervention STudy): A Multi-Level, Community-Based Intervention to Increase COVID-19 Testing Among Black/African Americans and Latinos
(Laura D'Anna, Principal Investigator; Pari Sabado, Co-Investigator)
Funder: National Institutes of Health, RFA-OD-21-008, Emergency Awards: Community-engaged COVID-19 Testing Interventions among Underserved and Vulnerable Populations – RADx-UP Phase II

Project ASSIST (Access and Social Support Intervention STudy), proposed to employ peer-led intervention techniques to increase COVID-19 testing and vaccination uptake among Black/African American and Latinos, two groups that have been disproportionately impacted by the COVID-19 pandemic.

NOVEMBER 2021

A Dyad/Friendship Circle Pilot Intervention to Reduce Nicotine Exposure among Black and Latinx MSM
(Laura D'Anna, Principal Investigator; Matt Mutchler, CSUDH, Co-Investigator)
Funder: Tobacco-Related Disease Research Program (TRDRP), The Regents of the University of California, Office of the President, High Impact Pilot Award

This application proposed a mixed methods approach to develop a culturally and contextually responsive brief intervention to reduce nicotine exposure and conduct a feasibility pilot test with dyads and small friendship circles of Black and Latinx men who have sex with men (BLMSM).

NOVEMBER 2021 (continued)

The Association between Intergenerational Trauma and Nicotine and Cannabis Use
(Pari Sabado, Academic Principal Investigator; Vattana Peong, The Cambodian Family, Community Principal Investigator, Laura D'Anna, Academic Co-Investigator)
Funder: Tobacco-Related Disease Research Program (TRDRP), The Regents of the University of California, Office of the President, Community-Partnered Participatory Research Award

The proposed study consisted of a collaboration between CHER and The Cambodian Family (TCF), a social service agency serving Cambodian immigrant and refugee populations since 1980. The overarching goals of this study were to examine intergenerational trauma, parent/child relationship, cultural identification, and mental health among youth and parent dyads, and to elucidate the mechanisms by which parental trauma is associated with use of nicotine and marijuana products among Cambodian and Vietnamese transitional age youth (TAY; 16-25 years).

MAY 2022

PPOWER3: Supporting Young Black Adults to Overcome Socio-Structural Stressors
(Laura D'Anna, Principal Investigator)
Funder: National Institutes of Health, RFA-RM-22-001, Transformative Research to Address Health Disparities and Advance Health Equity at Minority Serving Institutions (U01)

The PPOWER3 project sought to mitigate the physical and emotional effects of disparate stress stemming from experiences of systemic racism and injustice through a multi-level racial healing intervention designed to empower Black adults to implement and sustain practices that enhance justice, wellness, and resilience in their own lives. This application proposed to use a Community Based Participatory Research (CBPR) approach to develop and test interventions that prepare and empower young Black adults (ages 18-25) in the greater Long Beach area, and simultaneously bring participants into positions where they can participate in the guidance of organizational-level changes toward the adoption of practices that embrace the principles of a racial healing justice framework, and diminish the stress induced weathering, which is a consequence of surviving injustice.

B. Student and Faculty Involvement

STUDENT MENTORSHIP

CHER offers internship and volunteer opportunities to undergraduate and graduate CSULB students. The CHER internship is a semester-long placement to provide students with experience in the area of minority health, health disparities and health equity research, and develop skills useful for entry-level health related careers and preparation for higher education. As interns and volunteers, the students serve as research assistants, providing support to Center staff with various research related activities that include literature searches and reviews, transcription of audio recorded qualitative interviews and focus groups, data cleaning, coding, entry, and analysis, preparation of graphs, tables and narrative summaries of findings for reports and general office duties as needed. Students are also offered the opportunity to assist with data collection, such as survey administration and phone interviews. Graduate students are also assigned more advanced research-related opportunities such as the development of abstracts, presentations and manuscript, proposal and report sections, in particular if they are interested in pursuing a doctoral degree. CHER's director and staff work with interns providing training, feedback on assignments, and mentorship. Due to the COVID-19 pandemic, the internships were transitioned to a remote placement with all intern assignments and check-ins coordinated via a combination of email and Zoom meetings. Beginning summer 2022, internship and volunteers follow a hybrid placement, with select assignments conducted in the CHER office as well as remotely. During this reporting period, three undergraduate and two graduate students, all from the Health Science Department, were engaged with CHER as volunteers or student interns (see Table 3). In addition, during summer 2022 one health science undergraduate student and a CSULB MPH graduate (former intern) were engaged as volunteers.

Table 3: CHER Student Interns and Volunteers

STUDENT INTERNS/VOLUNTEERS
Graduate Students
Myriah Kunipo-Aguirre*
Kiara Lacambra
Irene Tri
Rebecca Rink
Undergraduate Students
Richelle Chow
Sofia Geiger*
Bobby Sanchez
Alumni
Brittany Levenson**

*Student volunteer
**2018 MPH intern

CSULB COLLABORATIONS

CHER Director, Dr. D'Anna and the CHER team collaborated with CSULB faculty and staff members on projects and in the preparation of proposals and/or manuscripts during the year under review (see below).

Table 4: CSULB Faculty/Staff Collaborators

FACULTY/STAFF	CSULB DEPARTMENT
PPOWER^2 Project Collaborators	
Heidi Ortiz	Student Health Services
CHER Institute Summer Program Presenters	
Joanna Barreras	School of Social Work
Niloo Bavarian	Health Science
Selena Nguyen-Rodriguez	Health Science
Proposal and Manuscript Development	
Claire Garrido-Ortega	Health Science
Fiona Gorman	Health Science
T. Alex Washington	School of Social Work

CONTRIBUTIONS TO THE COLLEGE OF HEALTH AND HUMAN SERVICES

CHHS Faculty Participation in the CHER Institute
A total of 12 CSULB faculty have participated in the CHER Institute since its inception, with nine faculty (75%) from CHHS (see list below).

CSULB CHER Institute Faculty Fellows

2017
Niloo Bavarian – Health Science/CHHS
Virginia Gray – Family and Consumer Sciences/CHHS
Amber Johnson – Health Science/CHHS

2018
Salim Al-Ani – Speech Language Pathology/CHHS
Fiona Gorman – Health Science/CHHS
Kellie Walters – Kinesiology/CHHS

2019
Isabella Lanza – Human Development/CLA

2020
Sandra Arevalo – Human Development/CLA
Joanna Barreras – Social Work/CHHS
Melawhy Garcia – Health Science/CHHS

2021
Olajide Bamishigbin Jr. – Psychology/CLA
Matthew Jarequi – Family and Consumer Sciences/CHHS

ACADEMIC AND COMMUNITY COLLABORATIONS

The table below lists faculty from other academic institutions across the U.S. who participated this reporting period as *Faculty Mentors* for the NIGMS funded CHER Institute/IPERT Program.

Table 5: CHER Institute Faculty Mentors

CHER Institute Faculty Mentors	**Institution**
Lourdes Baezconde-Garbanati, PhD Professor, Dept. of Population & Public Health Sciences Associate Dean for Community Initiatives Associate Director for Community Outreach and Engagement, USC Norris Comprehensive Cancer Center	Keck School of Medicine, University of Southern California
Ricky N. Bluthenthal, PhD Professor, Department of Preventive Medicine, Institute for Prevention Research	Keck School of Medicine, University of Southern California
Dorothy C. Browne, DrPH Adjunct Professor, Maternal and Child Health Gillings School of Global Public Health	University of North Carolina at Chapel Hill
Bradley T. Connor, PhD Associate Professor and Director Addiction Counseling Program, Department of Psychology	Colorado State University
Dennis Fortenberry, MD, MS Professor of Pediatrics, Section of Adolescent Medicine, Division Chief, Adolescent Medicine Adjunct Professor, School of Public Health Professor of Medicine	Indiana University School of Medicine
Matthew Mutchler, PhD Professor, Department of Social Work Director, Urban Community Research Center	California State University, Dominguez Hills
Nina Harawa, PhD Associate Professor in Residence (UCLA) Professor (Charles Drew)	David Geffen School of Medicine, UCLA Charles R. Drew University of Medicine and Science
Fernando Wagner, DS, MPH Professor, School of Social Work	University of Maryland, Baltimore,

In addition, CHER collaborates with multiple community-based organizations and academic researchers from other institutions on ongoing projects, and proposal and manuscript development as noted in the table below.

Table 6: Community Collaborators

NAME	ORGANIZATION/INSTITUTION
BHCLB Collaborators	
Gisele Fong	The California Endowment
James Sauzo	Long Beach Forward
Jan Victor Andasan	East Yard Communities for Environmental Justice
Sylvia Betancourt	Long Beach Alliance for Children with Asthma
Steve Gerhardt	Walk Long Beach
Danny Gamboa	Healthy Active Streets
Hilda Gaytan	Puente
PPOWER^2 Project Collaborators	
Wendell Glenn	Behavioral Health Services, Inc.
Ismael Salamanca	The LGBTQ Center of Long Beach
Leevi Camus	AIDS Project Los Angeles
Jaylen Hibbert	REACH LA
Community Wellness Program Collaborators	
Kimthai Kuoch	Cambodian Association of American
Vattana Peong	The Cambodian Family
Susanna Sngiem	United Cambodian Community
Ladine Chan	St. Mary Medical Center Families in Good Health
Chan Hopson	Khmer Parent Association
California Tobacco Control Program	
Ladine Chan	St. Mary Medical Center Families in Good Health
My Sister's Keeper Program	
Teresa Gomez	Long Beach Department of Health and Human Services
Myra Miller	GEMS Uncovered
Mary White	GEMS Uncovered
Cindy Sanchez	Pacific Gateway
Francesca Douglass-Franco	Humansave
Proposal Development	
Everardo Alvizo	Long Beach Department of Health and Human Services

NAME	ORGANIZATION/INSTITUTION
Sonya Arreola	Arreola Research
Laura Bogart	Rand Corporation
Nina Harawa	University of California, Los Angeles
Matt Mutchler	California State University, Dominguez Hills
Raina Pang	University of Southern California
Vattana Peong	The Cambodian Family, Santa Ana
Audrena Redmond	Black Lives Matter, Long Beach Chapter
James Sauzo	Long Beach Forward

COMMITTEE MEMBERSHIP

Jaelen Owens, Health Education/Outreach/Intervention Specialist Coordinator, served as a co-chair for the Long Beach Comprehensive HIV Planning Group (HPG) from 2021 to 2022. He continues to participate in the HPG as a member of the PrEP and Trans Wellness work groups. The HPG meets quarterly to coordinate efforts between Long Beach-based health agencies and community leaders to achieve the goals of the Long Beach HIV-STD Strategy. Jaelen is a CSULB graduate with a B.A. in Family and Consumer Sciences who began his employment at CHER as a student in 2016 as a part-time Health Education/Outreach Specialist.

In addition, Dr. Pari Sabado, our Director of Community Engagement and Evaluation, actively participates in meetings for two groups that support local tobacco policy advocacy efforts: the Coalition for a Smoke-Free Long Beach and the Coalition for a Tobacco Free Los Angeles County (regional meeting.)

Finally, Dr. Laura D'Anna serves as a member of the Long Beach Comprehensive HIV Planning Group and the PrEP Subgroup. These role includes monthly meetings, providing advice for data collection strategies, and cultivating collaborative grant proposal opportunities.

C. Accomplishments

This section includes manuscripts and abstracts related to CHER projects that were prepared and submitted by CHER staff from July 2020 to June 2021 and accepted for publication or presentation.

PUBLICATIONS

Under Review

D'Anna LH, Washington TA, **Nomura W**. Supporting Minority Serving Institution Faculty to Enhance Biomedical Research: The CSULB Center for Health Equity Research Institute. Journal of Health Disparities Research and Practice.

D'Anna LH, Chang K. Intersectionality of Healthcare Discrimination, Anticipated HIV Stigma, and Income as Predictors of HIV Testing Among a Community Sample of YBMSM. AIDS Care.

Sabado P, Kuoch K, Sngiem S, Peong V, Chan L, Hopson C, Veng T, Colfax G, Tham L, Sen-Matthews A, Ung V, Tieng P, Siphan C, Dance **J, Wood J, Doxey J, D'Anna L**. A Community-defined Approach to Address Trauma among Cambodian Immigrants and Refugees in Long Beach and Santa Ana, California. Health Promotion Practice.

CONFERENCE PRESENTATIONS

2022

Sabado P, Lacambra K, Kuoch K, **Wood J**, Colfax G, Chan L, Dance J, Hopson C, Peong V, Ung V, Siphan C, Sngiem S, Tham L, Tieng P. Examining the association between cultural identification and trauma and mental health outcomes among Cambodian refugees in Long Beach and Santa Ana, CA. Accepted for poster presentation at the American Public Health Association Annual Meeting, November 2022. Boston, Massachusetts.

Owens J, Tri I, D'Anna L. Marijuana use, expectancy, and sexual risk behaviors among Black men who have sex with men (BMSM) and with women (BMSW). Accepted for oral presentation at the American Public Health Association Annual Meeting, November 2022. Boston, Massachusetts.

Doxey J, Owens J, D'Anna L. Intimate partner violence (IPV), HIV-risk behaviors, marijuana expectancy and use among Black men who have sex with men (BMSM) in Los Angeles County (LAC), California. Accepted for oral presentation at the American Public Health Association Annual Meeting, November 2022. Boston, Massachusetts.

2021

Chang K, Wood J, Owens J, D'Anna L. An intervention to address alcohol and drug use among Black men in Los Angeles County during the COVID-19 lockdown. American Public Health Association Annual Meeting, October 2021. Denver, Colorado. (virtual poster presentation)

Sabado P, Kuoch K, Peong V, Sngiem S, Chan L, Hopson C, Soeung S, Colfax G, Sen-Matthews A, Ung V, Tieng P, Tham L, Siphan S, Dance J, **D'Anna L**. Using community-defined practices to decrease

symptoms of trauma among Cambodian refugees in Long Beach and Santa Ana, CA. American Public Health Association Annual Meeting, October 2021. Denver, Colorado. (virtual oral presentation)

Sabado P, Chan L, Mai V, Abea M, Wilcox M, **D'Anna L**. Exposure to secondhand smoke in multi-unit housing as a health equity issue. American Public Health Association Annual Meeting, October 2021. Denver, Colorado. (virtual poster presentation)

II. Unit Accounting

CHER was awarded a total of approximately $268,245 in funding for research and evaluation during this reporting period with approximately $396,791 in carry forward for a total of $665,035. With a number of CHER grant awards ending in 2021/2022, the CHER Team focused on seeking new grant sources as noted by the number of proposals submitted during this reporting period. CHER was awarded approximately $3.4 million in state and federal research funding beginning in the 2022 fiscal year in addition to its ongoing support from local evaluation subcontracts.

CURRENT PROJECTS

CHER Institute – Innovative Programs to Enhance Research Training (IPERT) YR 6
National Institute of General Medical Services
Fund G1992; Total Funding $1,923,986
Project Period: 09/01/21 – 08/31/22 (No cost extension, initial end date 08/31/21)

Year 6 Carry Forward	$320,346
Balance as of 06/30/22	$62,566

PPOWER2: Tobacco and Cannabis Intervention for Young Black MSM – YR 3
Tobacco Related Disease Research Program (TRDRP) – Univ. of California Office of the President
Fund G2039; Total Funding $1,106,197
Project Period: 07/01/21 – 03/30/22 (9-month no cost extension, initial end date 6/30/21)

Year 4 Carry Forward	$76,445
Supplement awarded July 2021	$184,365
Balance as of 06/30/22	$0

Community Wellness Program – Evaluation YR 5
California Department of Public Health, Office of Health Equity via Cambodian Assoc. of America
Fund G2039; Total Funding $228,000
Project Period: 07/01/21 – 04/30/22

Year 5 Award	$45,600
Balance as of 06/30/22	$16

API Regional Network to Reduce Tobacco-Related Disparities (also known as A.I.R.E.-Advocates Invested in Restoring the Environment) – Evaluation YR 4
St. Mary Medical Center (lead agency); CDPH, California Tobacco Control Program
Fund G2161; Total Funding $185,020
Project Period: 07/01/21 – 06/30/22

Year 3 Award:	$38,280
Balance as of 06/30/22	$0

Investigating the Potential for Non-Tobacco Wraps to Displace Cigarillos for Blunt Smoking
University of California, Irvine, Tobacco-Related Disease Program Pilot Award, University of Southern California Office of the President
Fund G2577; Total Funding $24,426
Project Period: July 2021 – June 2022

Award	$24,426
Balance as of 06/30/22	$0

Center for Health Equity Research
Research Stimulation Account
Fund RS028

Funds received during the review period	$13,366
Funds expended during the review period	$29,221
Balance as of 06/30/2022	$40,240

COMPLETED FUNDING

My Sister's Keeper Program – Evaluation
Long Beach Department of Health and Human Services (lead agency)
U. S. Department of Justice, Office for Victims of Crime
Fund G2328
Project Period: 09/01/19 – 12/31/21
Award $49,500

SPACE AND SQUARE FEET UTILIZED

CHER offices are located in F05, Suite 120. This suite of offices contains 1004 square feet of assignable space and a shared conference room with the Office of Research and Sponsored Programs that is approximately 300 square feet. CHER space includes four private offices (two of which are shared offices) and a reception area with space for three cubicles with work stations.

STAFF HYBRID WORK SCHEDULE

As of July 2021, CHER team members as well as student interns and volunteers follow a hybrid work schedule as a mitigation effort in response to the COVID-19 pandemic. Full-time staff work in the Center three days a week with schedules that allow for no more than 5-6 individuals (including students) in the office at the same time. Part-time staff work 1-2 days a week in the Center based on their level of effort. CHER laptops, generally used in the field for data collection and presentations, are loaned out to staff who share computer resources in their homes, and VPN capabilities are utilized by staff to access the CHER network on the CSULB server. Ongoing technical support for CHER staff is provided by Mr. Wood and CSULB/CHHS technology resources as needed.

CHER WEBSITE

A CHER website is located at sites.csulb.edu/HealthEquity and is regularly updated with CHER center-related news, achievements and project descriptions. The website was developed using the Drupal Content Management System, allowing a collaborative effort among CHER staff to incorporate pertinent information about the center in an attractive, user-friendly format. Site contents include pages outlining current and past projects, an event calendar, center-related news articles, staff bios and links to their publications, information on affiliated faculty and partner organizations, and other information about health equity and health disparities research that may be of interest to the public. Contact and event management, mailings, event announcements, and registration for CHER-sponsored events, including webinars and the summer CHER Institute, are managed using CiviCRM, an open-source module that

works with Drupal to provide event and contact management. CHER manages additional research support tools available through the website, including a MySQL database server, research Wiki, telephone and paper-based data management tools, and in-house installation of the open-source on-line survey tool 'Limesurvey' used in projects requiring greater flexibility than is available through third-party tools. The software allows CHER to provide special handling of sensitive data, complex question presentation and data validation, and data entry collaboration with community partners. During the current reporting period CHER has used these tools to increase the value of assistance it provides to community partners by helping them to automate the processing of funder-required data gathered though collaborative research efforts. Updates have been made to the content management and survey systems and University-wide server upgrades have also enhanced the speed and capacity of CHER's web-based research resources. For much of the year, CHER also continued to provide in-kind support to the CSULB BUILD project by hosting a student mentor database and search tool, developed and maintained by CHER technical staff, and assisted in migrating this tool to a new home at the website of the Office of Undergraduate Research Services.