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Establishing a Translational Research Center in California's San Joaquin Valley: Principles, Partnerships, and Initial Steps

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Establishing a Translational Research Center in California's San Joaquin Valley: Principles,
Partnerships, and Initial Steps

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Abstract

The Great Valley Center seeks to promote the social, economic, and environmental well-being of California's Central Valley. UC Merced's Health Sciences Research Institute (HSRI) was established in 2012 to engage in collaborative, multidisciplinary research with a community emphasis in order to rapidly develop, test, and disseminate new ways to improve health. To address the numerous health disparities present in the San Joaquin Valley, HSRI began working toward the development of a regional Translational Research Center, to allow San Joaquin Valley residents access to the latest and most effective interventions and translate findings into community actions. The attached paper is a summary of a 300-hour fieldwork experience, completed through a partnership between HSRI and the Great Valley Center. The work presented encompasses the beginning steps of the Center's development, including planning, fund-seeking, community outreach, research, and methodology development. It also provides evidence on how the fieldwork experience fulfilled Master of Public Health program competencies, core competencies, and cross-cutting/interdisciplinary competencies and defined by the Council on Education for Public Health.

Establishing a Translational Research Center in California's San Joaquin Valley: Principles,
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Introduction

California's San Joaquin Valley is a rich agricultural region with unsurpassed growth and an ethnically diverse population. However, despite its wealth and diversity, many of the San Joaquin Valley's residents face crippling poverty and numerous health disparities.

In 2005, the University of California at Merced was established with the principle of integration to its surrounding community. In December 2013, UC Merced's Health Sciences Research Institute (HSRI) began discussion with the Great Valley Center (GVC) to develop a Translational Research Center (TRC) that will speak to the University's principle of community integration. Translational research ensures that new treatments and research knowledge research the populations they were developed with and intended for. With GVC, HSRI would develop community engagement, recruitment, and dissemination methodologies to inform the work of the TRC.

Community-engagement is increasingly viewed as foundational to translational research and community health improvement. In reviewing the literature, it appears that building a community-engaged research foundation requires certain steps for success: defining community, identifying partners, improving knowledge of community engagement principles, and improving dissemination strategies. HSRI and GVC have undertaken these four steps in the initial development of the TRC and potential outreach strategies for traditionally hard-to-reach, vulnerable populations.

Background

California's San Joaquin Valley is one of the richest agricultural regions in the world and is also one of the most economically diverse and fastest growing regions in the United States.

Despite being one of the backbones of the world economy, the residents who produce the region's wealth experience great social and health inequities, and are often forgotten. Though the San Joaquin Valley has a poverty rate worse than Appalachia, it receives less funding and has historically been ignored by research and philanthropic efforts (Cowan, 2005). As a result, residents respond to academic health research in a similar way to other areas of the nation – with hesitancy and distrust.

The San Joaquin Valley encompasses the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern and had a population of nearly four million people in 2009. (U.S. Census, 2009). From 1980 to 2003, the population increased by 75%, and in 2009, more than one-fifth of Valley households had incomes below the federal poverty level. Additionally, almost 30% of the San Joaquin Valley's population lacks a high school diploma (Joint Center, 2012).

Socioeconomic conditions exert an important influence on health status. Nationally, families with incomes below the federal poverty level are more than three times more likely to report fair or poor health than families with incomes above twice the poverty level (Adams, Barnes, Vickerie, 2007). In the San Joaquin Valley, the case is no different, with low-income and minority populations experiencing poorer health outcomes than more affluent, Caucasian residents. According to the Joint Center for Political and Economic Studies' *Place Matters for Health in the San Joaquin Valley* report:

- The premature death rate in the lowest-income zip codes of the San Joaquin Valley is nearly twice as high as the rate in the high highest-income zip codes.
- Life expectancy varies by as much as 21 years, depending on zip code, in the San Joaquin Valley.

- Areas with the highest levels of respiratory risk in the San Joaquin Valley are also home to the highest percentages of Hispanic residents. Furthermore, areas with the lowest levels of respiratory risk are home to the lowest percentage of Hispanic residents.
- One in six San Joaquin Valley children is diagnosed with asthma before the age of 18, which is now considered an epidemic level.
- The health status of first-generation Hispanic immigrants is similar to the Caucasian population of the San Joaquin Valley. However, the health status of subsequent Hispanic generations deteriorates, likely due to economic, educational, and political inequities.

There is a movement across the nation to address health disparities through community-engaged research and dissemination techniques, in order to: inform residents about health concerns, disparities, and healthy-living resources available to them; give residents better access to the newest and most effective treatments available; and build capacity among residents to advocate for fair, equitable conditions for the improvement of health status. The literature suggests that health disparities will persist without the adoption of community-engaged research that seeks to find answers to pressing public health questions. Stakeholders, including researchers, community leaders, policy makers, and funders, are increasingly exploring how community-engaged research can improve the translation of research findings that will benefit local communities. (Rosenstock, Hernandez, Gebbie, 2003)

Despite this movement, less than one percent of the population participates in research studies each year and members of racial/ethnic minorities, rural population, women, and the elderly are underrepresented in research. As a result, findings often do not account for cultural, linguistic, racial/ethnic, gender, and age differences. Both community distrust of research and a lack of sustained engagement practices among health researchers in the San Joaquin Valley have likely contributed to this. Historically, community members often perceive research as primarily

serving the needs of the researcher rather than the community participants themselves, making it difficult for academics to gain access to and trust from the community they wish to serve (McCloskey, McDonald, Cook, 2011). In addition, no formal translational research center exists in the San Joaquin Valley to engage residents regarding health research for the elimination of health disparities. To ensure the validity of future findings, it is essential that academics continue to engage the community to gather information and concerns from all populations (Rochon, Mashari, Cohen, 2004; Patel, Doku, Tennakoon, 2003).

To address this issue, the Health Sciences Research Institute (HSRI) at the University of California, Merced has commenced the development of a Translational Research Center (TRC) to serve the San Joaquin Valley. The TRC will have the goals of allowing San Joaquin Valley residents access to the latest and most effective interventions and translating findings into actions that improve the health of residents and eliminate health disparities. In order to do this effectively, HSRI reached out to the Great Valley Center (GVC) in Modesto, CA, which has a 17-year history of community improvement in the San Joaquin Valley through research and programmatic efforts. GVC was brought in to collaborate with HRSI researchers to design the community outreach and recruitment efforts of the TRC.

UC Merced was established in the San Joaquin Valley as a response to the desperate need for problem-solving research in the region. Over the last seven years, UC Merced has begun integrating community-engaged scholarship principles and goals into campus practices (DeLugan, Roussos, Skram, 2014). As an institute of UC Merced, HSRI was established in 2012 with the mission to engage in collaborative, multidisciplinary research with a community emphasis in order to rapidly develop, test, and disseminate new ways to improve health. Through research clusters on health disparities, environmental health, cancer control and prevention, infectious diseases, and behavioral health, HSRI is working to meet this goal.

The Great Valley Center's mission is to serve the economic, social, and environmental well-being of the San Joaquin Valley through an engaged, informed, and capable public. Established in 1997, GVC has a long history of providing residents with the information they need to make informed choices and advocate for their best interests, and the tools and training to live fuller, more rewarding lives. To do this, GVC produces annual indicator reports regarding the economic, environmental, health care, education, and well-being landscapes of the San Joaquin Valley and provides resources and education to residents and local government officials. GVC measures success as the number of individuals or organizations reached. Following a recent evaluation, GVC was found to have trained nearly 4,000 individuals on computer literacy basics through community partner outreach and has provided local governments with 40 greenhouse gas inventories. It is because of GVC's successful outreach to governments, community-based organizations, and residents alike that HSRI has chosen to develop community-engagement methods in partnership with them.

In 2006, the Clinical Translational Science Award (CTSA) consortium was launched, with the goal of translating basic research findings into clinical application. A key function of the CTSA consortium is community engagement – to effectively engage academics and communities in bidirectional dialogue. In 2010, the CTSA community-engagement committee began working with the National Institutes of Health (NIH) Director's Council of Public Representatives (COPR) to define community engagement in research – an inclusive process that supports mutual respect for values, strategies, and actions between all partners affiliated with the issues affecting the well-being of a community (Minkler, 2005). During their work, the group identified core principles of community-engaged research: definition of community, strong community-academic partnerships, equitable power and responsibility, academic and community capacity building, and successful dissemination (Ahmed, Palermo, 2010).

Based on a review of the literature and these principles, four initial steps appear necessary for successful community-engaged research at UC Merced's TRC: define community, identify partners, embrace community-engagement principles, and improve dissemination strategies.

1. Define Community - Community is a fluid concept in which membership may be by location, choice, affiliation, history, common interest, or innate traits like gender, race, or sexual orientation. Academic centers should view these communities as complex systems and may need guidance to ensure successful engagement (Minkler, 2005).
2. Identify Partners – Guidance will likely come from the input of community partners, which may include, but are not limited to: community-based organization, faith-based organizations, government agencies, and community-based health practitioners. It is essential to identify all organizations and individuals that may be interested in improving the health of the community, because they have access to and knowledge of targeted, vulnerable populations. (Minkler, 2005)
3. Embrace Community-Engagement Principles – It is important for academic researchers to learn the principles of community engagement and their underlying theory. (Ahmed, Palermo, 2010) The Centers for Disease Control and Prevention booklet “Principles of Community Engagement” defines nine principles for success in community engagement (CTSA, 2011). In addition to these, the literature suggests that it is essential for academic centers: learn about the community in detail, share power, include community partners in all phases of research, and appropriately compensate community partners for the time (Community Engagement Key Functions, 2011; Flicker, Guta, Larkin, 2010).
4. Improve Dissemination Strategies – Dissemination is defined as the processes and factors that lead to widespread use of an intervention by the target population (Rabin, 2008). In the traditional academic model, researchers complete a study, submit a manuscript for

publication to academic journals, and present their findings at conferences with their peers. However, non-academics rarely become aware of the findings presented in these journals and how they may be of benefit for their community. Therefore, it is essential that academics engaging in community-engaged research embrace non-traditional methods of dissemination. In the San Joaquin Valley, there is anecdotal evidence that some of these dissemination routes may be: social justice networks' newsletters, faith-based leaders, schools, Spanish- and Hmong-language radio and/or television, retailers including flea markets and carnicerías, and the production of fotonovelas.

Implementation of the Project

Though discussions of a partnership for the development of the TRC began in December of 2013, a formal work plan was not formalized until early May 2014 just before the fieldwork semester began. GVC was identified to develop the community-engagement arm of the TRC in Stanislaus County. Initial steps were determined to be:

1. Review of established TRCs and community-engagement principles
2. Development of a Community Reference Group
3. Development of a pilot participant recruitment methodology
4. Review and potential revision of air quality survey to be administered

Along with these partnership steps, GVC would seek funding to sustain and expand their community-engaged research efforts beyond the Translational Research Center.

The fieldwork project was designed to apply a variety of interventions to improve community-engaged research efforts between academics and community leaders, including program planning, research/evaluation, survey design, and community outreach. Using these interventions, fieldwork-specific learning goals and objectives were determined to be:

Goal: Develop GVC/HSRI partnership idea

- Objectives:
 1. Understand opportunities and strengths of both organizations, visions for partnership
 2. Verbalize partnership concept
 3. Develop plan through December, including budget
- Background: Initial discussions began in December of 2013. Throughout the following months, a series of meetings were held with HSRI researchers and staff and GVC staff to determine: goals, feasibility, roles, timeline, and funding.

Goal: Gain comprehensive understanding of community-engaged research partnerships and principles

- Objectives:
 1. Complete literature review;
 2. Engage in discussions with leaders of established centers;
 3. Attend Center for Collaborative Research for an Equitable California (CCREC) Collaborative Research Training Institute.
- Background: The practice of community-engaged scholarship is still relatively new in the academic world. In order to successfully design the TRC and outreach methodologies, a literature review was completed and discussions were held with Dr. Sergio Aguilar-Gaxiola, director of the UC Davis Center for Reducing Health Disparities and staff and directors of CCREC. Results of the literature review are included in the background section above.

Goal: Establish Community Reference Group

- Objectives:

1. Research organizations and advocates in Stanislaus County with access to and intimate knowledge of targeted populations;
 2. Conduct outreach to organizations and advocates; convey the goals and principles of community-engagement;
 3. Convene Community Reference Group to meet with HSRI team and provide feedback on the TRC, air quality survey, and recruitment methodology.
- Background: To ensure cultural competence and appropriate methods for targeted communities in Stanislaus County, the partnership convened a community advisory board, named the project's Community Reference Group. Community advisory boards can facilitate research by providing necessary, accurate advice about the informed consent process and research protocol design (Strauss, 2001). Community advisory boards must be representative of the community as a whole and have access to and intimate knowledge of those who identify as part of the community to understand the potential risks and benefits to those they represent (Quinn, 2004).

Goal: Develop participant recruitment methodology and list of dissemination techniques

- Objectives:
 1. Research recruitment through community-based organizations;
 2. Develop recruitment methodology for Institutional Review Board approval;
 3. Discuss potential dissemination methods with researchers and community leaders.
- Background: Research recruitment through community-based organizations is an area that has not yet been extensively employed, particularly for hard-to-reach and/or vulnerable populations. For this project, the partnership looked at the literature regarding community-based organization outreach and found that many projects were not successful. However, a top-down approach was successful in recruiting black and

Hispanic women (Alvarez, Vasquez, Mayorga, Feaster, Mitrani, 2006). The partnership decided to model the TRC methodology after this approach.

Goal: Increase GVC's capacity for community-engaged research

- Objectives:
 1. Submit CCREC Planning Grants application;
 2. Submit Center for Health Program Management Capacity Building application;
 3. Submit Sierra Health Foundation Responsive Grants application.
- Background: HSRI committed \$12,000 for the completion of this project through December 2014. This includes funds to survey 250 San Joaquin Valley residents using the revised air quality survey and approved recruitment methodology, which is not included as a goal for the fieldwork project. However, GVC hopes to expand on the initial partnership steps and establish the capacity to engage individual communities in ongoing dialogue regarding the social determinants of health, health disparities, and their concerns regarding health research participation, as well as identify potential research questions. GVC applied for these funds to ensure the training of skilled, culturally competent focus group leaders and the ability to hold 4-6 focus groups with Stanislaus County residents.

Results

Because the fieldwork project is part of an ongoing process, the success of all aspects cannot yet be fully assessed. However, the initial projects completed proved to be successful in a number of ways, including the effective use of research, outreach, program planning, and survey design.

Review of established principles and discussions with the leadership of established community-engaged research centers has provided a wealth of knowledge regarding successful community-academic relationships that the TRC should utilize in ongoing work. These principles include the nine principles of community engagement defined by the CDC and four identified steps for successful community-engaged academic centers: define community, identify partners, embrace community-engagement principles, and improve dissemination strategies.

The establishment of the Community Reference Group has been recognized as a major success by all involved. With an initial goal of 10-15 members, GVC was able to recruit 12 community-based organization leaders and/or community advocates to represent the communities within Stanislaus County. In July 2014, the first meeting of the group was held and a tremendous amount of feedback was given in regard to community engagement, the air quality survey design, and potential methodologies for recruitment and survey administration. Feedback was used to revise both the survey and the recruitment methodology. Community partners with members serving on the Community Reference Group are listed below, in no particular order. Two individuals, whose names are not provided, also serve on the Community Reference Group.

1. Council for the Spanish Speaking: El Concilio
2. Sierra Health Foundation
3. West Modesto-King Kennedy Neighborhood Collaborative
4. Assyrian American Civic Club of Turlock
5. Parent Resource Center
6. Center for Human Services
7. Merced Organizing Project
8. Congregations Building Community
9. Stanislaus County Behavioral Health and Recovery Services

10. Modesto Junior College

The development of a research recruitment methodology remains a work in progress.

Although a methodology was formulated based on a review of the literature and feedback from the Community Reference Group, the UC Merced IRB has not yet approved it. The methodology will be submitted to the IRB on approximately September 5, 2014. Approval/denial is expected by the beginning of October. If approved, air quality survey administration through community-based organizations will commence in October. If denied, necessary adjustments will be made.

Throughout the fieldwork experience, three grant applications were submitted. Two applications, to CCREC and the Center for Health Program Management, were not granted; GVC is still waiting to hear from the Sierra Health Foundation.

Public Health Significance

Translational research is increasingly regarded as important for the improvement of population health and health care delivery. To many, the term translational research refers to “bench-to-bedside” research. For others, including for the purposes of this fieldwork project, it means translating research into community practice – where the community is the laboratory and all stakeholders are invited to participate in the research protocol (Woolf, 2008).

Translational research works to improve community health in a number of ways, including through participation, dialogue, and dissemination. Greater research participation will allow for increased research validity and more appropriate methodologies in regard to culture, race, linguistics, gender, age, and more. Additionally, dialogue among researchers and targeted populations will allow for topics of interest to emerge from the community, leading to research projects most in tune with community health concerns. Despite growing literature on health promotion interventions, few are consistently implemented. Translational research provides the opportunity to close this gap and effectively disseminate findings for program implementation,

particularly in areas serving low-income, rural, or minority populations confronting health disparities (Clark, 1995).

Translational research also utilizes community expertise and relationships as an effective way to address community health concerns and health disparities. In most cases, community members have a deeper understanding of the community and the problems it faces than outside researchers. Bringing community members to the table allows the research team to better understand community problems, interests, and potential organizations and groups for findings dissemination and program implementation. Distrust of research has traditionally placed a divide between researchers and community members. Translational research affords the opportunity to bridge this gap and identify solutions that utilize the strengths of both groups to address health disparities.

Competencies Addressed

The learning objectives completed during the fieldwork semester demonstrate achievement of University of San Francisco Master of Public Health (MPH) program competencies, as well as Council on Education in Public Health Core Knowledge areas and cross-cutting/interdisciplinary values.

In regard to the MPH program competencies, the fieldwork objectives and associated activities allowed for the review of health statuses in the San Joaquin Valley and their associated determinants, the critical assessment of public health literature, the application of theoretical constructs of social change and social justice, the application of evidence-based principles to program planning, the demonstration of leadership abilities, the identification of ethical and legal principles, and the development of programs responsive to cultural values and traditions. As part of the literature review, the health statuses of different San Joaquin Valley populations was assessed through California Health Interview Survey data and various reports, such as the Fresno

State *Place Matters* report. This review, along with a review of translational research partnerships and principles, allowed the partnership to determine targeted populations and methods most likely to result in a successful start to the TRC. While designing the first programmatic steps, including partnership formation and development of the Community Reference Group, established principles were called upon. In addition, leadership abilities were called for when recruiting for and convening the first Community Reference Group meeting, which ensured that the project as a whole, air quality survey, and recruitment methodology were culturally appropriate for the targeted populations. During the writing of the IRB submission and human-subjects research training, competence of ethical and legal principles was demonstrated.

The core knowledge areas addressed during the completion of this project were epidemiology, social and behavioral sciences, and public health administration and leadership. Not only was epidemiology used during the review of health statuses within the San Joaquin Valley, the continuation of the project will call for increased utilization of epidemiological principles – data collection, analysis, and dissemination. By approaching health research in partnership with the community and their associated social, cultural, and behavioral beliefs, the project called upon social and behavioral sciences. In addition, the Community Reference Group review of the air quality survey and recruitment methodology in regard to social and cultural competence drew upon the social and behavioral sciences. Public health administration and leadership was a substantial portion of the fieldwork semester. Throughout the project, skills in project management, budgeting, grant writing, and meeting facilitation were utilized.

The entirety of the project afforded activities that addressed communication and informatics, diversity and culture, leadership, professionalism, program planning, and systems thinking. Taking into account the various roles among GVC staff, HSRI researchers, community-based organizations on the Community Reference Group, and community members drew upon

systems thinking. Navigating these roles also brought diversity and culture into the project, to ensure that proposed activities and methodologies were culturally competent and that voices from all groups within Stanislaus County were heard. Leadership and professionalism were called upon during the development of the partnership and associated work plan, convening of the Community Reference Group, and all associated meetings, including attendance at CCREC's Collaborative Research Training Institute. The Institute was for a select group of about 25 graduate students and early career scholars interested in or working on community-engaged research projects. Not only did attendance at the Institute inform the review of existing partnerships and principles, it allowed for leadership through small group facilitation and representation of HSRI/GVC. Evidence of competence in communication and informatics was necessary when producing grant applications, attending meetings, and presenting information to GVC and HSRI leadership in both written and oral formats.

Personal Reflection

During the fieldwork semester, my work with HSRI and attendance at CCREC's Institute allowed me to explore my personal educational and career goals. During the beginning stages of the fieldwork project, I believed that acting as a liaison between researchers and the community, in the way I was at GVC, was enough for me and that I'd be able to have a foot in both worlds. However, as the semester went on and the project developed, I realized that traditional translational research was not enough for me and that I want my future work to be even more engrained in the community, as in community-based participatory research (CBPR). At the Institute, I was able to engage in discussions with researchers doing this work and PhD students interested in doing this work as well. During my discussions with them, I explored the possibility of designing and implementing my own projects and the vast consensus was that if I wanted to engage in my own public health research work with the community, I should consider a

doctorate rather than relying on the collaboration of those with a doctorate. At this point, I believe that I need a break from academia, however I will continue to explore the possibility of a doctorate and different programs that value CBPR principles. My preceptor, Dr. Anna Song, and I will look into programs together and I will begin studying for the Graduate Record Examination to ensure I am prepared to apply when I decide the time is right.

Conclusion

The fieldwork experience proved to be an appropriate end to the MPH program, as it drew on key concepts and skills learned during program coursework and demonstrated competence in core knowledge areas and cross-cutting values. The associated goals and objectives were challenging at times, particularly when dealing with the different structures, values, and staff of two organizations. However, the work accomplished over the semester was a tremendous start to a much-needed TRC in the region. In an area with so many health disparities present, involving the community and community leaders in research and findings dissemination is necessary for combatting the disparities present and I am proud to have been a part of this work. Not only did the fieldwork activities contribute to the design of the TRC, they contributed to my personal understanding of research and community engagement, as well my own career and educational goals. By drawing on the knowledge I gained during my time in the MPH program and allowing me to develop my leadership, program planning abilities further, the fieldwork experience proved to be an incredibly valuable end to my public health education.

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**Supervised Field Training in Public Health
Student Learning Contract – Attachment 1**

Goal 1: Develop UC Merced/Great Valley Center partnership idea				
Objectives (S)	Activities	Start/End Date	Who is Responsible	Tracking Measures
Understand opportunities and strengths of both organizations, visions for partnership	Attend brainstorm meetings between UCM/GVC leadership	12/06/13 – 06/15/14	Rachel Cox, Dr. Benjamin Duran, HSRI	
Verbalize partnership concept	Project development meetings between UCM/GVC leadership	04/09/14 – 06/15/14	Rachel Cox, Dr. Benjamin Duran, HSRI	
Develop plan through December	Discussions, budget development	07/01/14 – 12/31/14	HSRI, Dr. Ben Duran, Rachel Cox	

Goal 2: Gain comprehensive understanding of existing Community-Engaged Research partnerships and principles				
Objectives (S)	Activities	Start/End Date	Who is Responsible	Tracking Measures
Research existing partnership frameworks and best practices	Literature review, individual organization website research, meet with existing CER orgs, attend CCREC conference	02/03/14 – ongoing	Rachel Cox	Submit synopses/review notes to Dr. Anna Song for feedback. Will continue to work toward publication after fieldwork ends.
Understand timeline, strengths, weaknesses, challenges, strategies etc.	Meet with leaders of existing CER organizations (in person or by phone)	04/16/14 – 06/15/14	Rachel Cox, Dr. Benjamin Duran	

Goal 3: Establish Community Reference Group (CRG)				
Objectives (S)	Activities	Start/End Date	Who is Responsible	Tracking Measures
Build short list	Research organizations that have access to and knowledge of targeted population in SJV	06/15/14 – 07/01/14	Rachel Cox	
Establish relationships, gain commitment	Meet with identified leaders/advocates by phone or in person	06/15/14 – 07/07/14	Rachel Cox, Dr. Benjamin Duran	
Convene CRG	Hold meeting w/HSRI staff and CRG at GVC	07/17/14		

Goal 4: Develop Participant Recruitment Methodology				
Objectives (S)	Activities	Start/End Date	Who is Responsible	Tracking Measures
Understand past efforts	Literature, other orgs	05/01/14 – 08/01/14	Rachel Cox, Dr. Benjamin Duran	
Run ideas past CRG	CRG meeting, calls	07/01/14 – 08/01/14	Rachel Cox, Dr. Benjamin Duran	
Gain approval	Submit to IRB	September 2014	Rachel Cox	

Goal 5: Increase GVC Capacity for Community-Engaged Research				
Objectives (S)	Activities	Start/End Date	Who is Responsible	Tracking Measures
Grant Writing	Narrative, budgets for: CCREC, Sierra Health Foundation, Center for Health Program Management	03/01/14 – 08/01/14	Rachel Cox	

