

## Cultural Effectiveness in Research: A Summary Report of a Panel Session Entitled “Engaging Populations at Risk”

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## *CONFERENCE PANEL SECTION*

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# Cultural Effectiveness in Research: A Summary Report of a Panel Session Entitled “Engaging Populations at Risk”

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**ABSTRACT.** This paper summarizes two presentations and a panel discussion engaging health scientists, educators, and community outreach professionals who have drawn upon their experiences as researchers and agricultural workers to describe research challenges related to access, trust, language, culture, and participant benefit. These presentations and discussion took place at the New Paths: Health and Safety in Western Agriculture conference, November 11–13, 2008. An overview of changing demographics of the western agricultural workforce was provided followed by a presentation of the application of community-based participatory research (CBPR) principles including cultural considerations. Using an interview format, the panel participants discussed challenges related to involving members of vulnerable agricultural worker populations throughout the research process. Lessons learned and recommendations were explored and successes identified.

**KEYWORDS.** Commercial fishermen, community-based participatory research, cultural effectiveness, Hispanic, indigenous communities, migrant farm workers, Mixteco, stakeholders in western agriculture, Vietnamese

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## INTRODUCTION

The overall purpose of this session was to provide members of the audience—researchers, advocates, students, safety and health professionals—with practical information to improve the research process when working with culturally diverse populations.

The session presenters addressed three recommendations from the report of the National Academies in response to an evaluation of the National Institute for Occupational Safety and Health (NIOSH) agriculture, forestry, and fishing research program. Specifically, these recommendations were to “1) clearly identify and track target populations, 2) involve stakeholders throughout the research process, and establish an effective multipartite stakeholder mechanism that includes at-risk workers, and 3) implement integrative and interdisciplinary approaches in research practices.”<sup>1</sup>

Effective involvement of stakeholders throughout the research process, although desirable, presents a number of challenges when workers do not speak English, struggle with other literacy issues, maintain cultural norms that differ from those of the research team, are fearful of “officials,” and toil to meet basic survival needs.

Current data sources, demographic information, and difficulties in identifying and characterizing the agriculture workforce in the western United States were reviewed in order to create a discussion framework. A summary of community-based participatory research (CBPR) strategies was provided along with examples, drawing on actual experiences to demonstrate effective methods to gain trust and respond to the needs/desires of stakeholders. A panel representing safety and health research and community outreach with various cultures (Hispanic migrant and settled agricultural workers, Vietnamese commercial fishermen, indigenous Mexican immigrants speaking languages such as Mixteco) interacted to share challenges, cultural insights, and lessons learned from research and intervention experiences with vulnerable workers. Successes and recommendations were explored.

Coauthor Karen Gilmore was instrumental in working with the Pacific Northwest Center for Agricultural Safety and Health to organize this session, moderated by Dr. Jeffrey Levin and

facilitated by Dr. Eva Doyle. Dr. Levin served as rapporteur.

## BACKGROUND

**Jeffrey L. Levin, MD, MSPH**, is Professor and Chair of the Department of Occupational Health Sciences at The University of Texas Health Science Center at Tyler. He is a graduate of the University of Texas Medical School at San Antonio. He holds a Master of Science Degree in Public Health and is board-certified in both internal medicine and occupational medicine. He has been in the field of occupational medicine for over 20 years and has lectured widely on a variety of occupational respiratory diseases and occupational health in agriculture and commercial fishing. He is Director of the Southwest Center for Agricultural Health, Injury Prevention and Education.

Dr. Levin presented an “Overview of Changing Demographics of the Western Ag Workforce.” He was assisted with the preparation of this presentation by coauthor, Amanda Wickman. He provided information about the NIOSH-funded Agricultural Centers, particularly those geographically representing the western United States. He went on to identify data limitations and gaps concerning the demographic make-up of the agricultural workforce throughout the country. He discussed 20th century trends resulting in increased agricultural mechanization and specialization involving larger yet fewer farm operations with increased efficiency and production.

This has implications for the demographic make-up of the agricultural workforce including the western United States. For example, in the Rockies regions of the United States, employment growth by occupation between 2000 and 2006 has been highest in farming, fishing, and forestry.<sup>2</sup> Throughout the United States, the worker population has become increasingly diverse, with the number of Hispanic operators having more than tripled since 1982<sup>3</sup> and the number of women operators having almost doubled in the two decades between 1982 and 2002.<sup>4</sup> Hispanic, Asian, Native American, and Native Alaskan operators

are concentrated in the western United States, with African American and White operators concentrated in the east. In 2005, farming also had a higher proportion of unauthorized workers compared with other selected work groups such as construction, production, transportation, and other service occupations.<sup>5</sup> The H2A temporary worker program makes it possible for agricultural employers who anticipate a shortage of domestic workers to bring nonimmigrant foreign workers to the United States on a seasonal basis. In 2007, the number of certified H2A workers increased nearly 30% compared with the prior year.<sup>6</sup>

Dr. Levin introduced Dr. Eva Doyle who spoke on the topic of “Applying Community-based Participatory Research Principles: Cultural Considerations.”

**Eva I. Doyle, PhD, MEd, CHES**, is an Associate Professor and the Director of Graduate Health Education in the Department of Health, Human Performance, and Recreation at Baylor University. She is a Certified Health Education Specialist (CHES) who specializes in cross-cultural health promotion in medically underserved communities. Her research interests focus on the development of appropriate methodologies for community-based participatory research (CBPR). She has led or assisted with CBPR-related work with migrant and seasonal farm workers, and in low-income communities in urban and rural populations in Texas and in southeast Brazil. Dr. Doyle teaches community-based strategies in her health education and field research courses.

In her presentation, Dr. Doyle discussed research involving culturally diverse worker populations, drawing on her own experience. For decades, health care providers and health researchers have endeavored to empower medically underserved communities. Yet, cultural differences, insensitive research approaches, and data collection that resulted in no community gains have driven a wedge of distrust and frustration between communities in need and those who possess the resources to help. Despite these challenges, researchers and the communities they serve have much to gain through collaborative partnerships. The guiding principles of community-based participatory

research (CBPR) can be used to develop a collaborative approach that benefits all partners.

Characteristics of effective CBPR partnerships were explored. In this presentation, an overview of the theoretical principles, characteristics, and benefits of CBPR served as a backdrop for describing practical application strategies and examples. Such examples included project goals to increase leadership capacity and measure effectiveness of a health promotion intervention, as well as the use of visuals relevant to low-literacy populations. Important cultural considerations such as translation and back-translation were described. Dr. Doyle discussed how the research and real worlds often “collide,” and suggested that, by combining research and community action at the same time in an integrated approach, research activities can be useful tools for community building and development. Some basic tips for how to initiate a CBPR partnership and resources for learning more about CBPR were provided, including useful Web-based resources.<sup>7</sup>

### **PANEL PARTICIPANTS**

The panel was assembled to address “Research with Populations at Risk—Lessons Learned from Research and Community Partner Perspectives.”

**Lawrence (Sam) Byrd** is an ex-migrant farm worker who first migrated to Idaho from Arizona in 1963. Mr. Byrd worked with his parents and four sisters in the fields of Arizona, Idaho, Oregon, and California until he was 21 years old. In 1976, he left the fields and went to work for the Idaho Migrant Council as an outreach worker and later became the executive director. Currently, Mr. Byrd serves as the Director of the Centro de Comunidad y Justicia, a nonprofit community-based organization that works to achieve social, educational, and economic justice for Latinos in Idaho. Mr. Byrd is also the President of Diversity Works!, a cross-cultural and organizational development consulting firm.

**Ivette Noa Roman-Muniz, DVM, MS**, was born and raised in Puerto Rico. After completing a pre-veterinary program at the University of Puerto–Mayaguez Campus in

1997, Dr. Roman-Muniz attended the School of Veterinary Medicine at the University of Wisconsin–Madison. She received her DVM degree in 2001, and moved to Colorado to complete an internship in Food Animal Internal Medicine and Surgery at Colorado State University (CSU) Veterinary Teaching Hospital. In 2004, Dr. Roman-Muniz completed a MS program in CSU's Department of Clinical Sciences, with an emphasis in adult education. Her MS thesis was *Worker Safety Training: Current Status and Future Needs of the Colorado Dairy Industry*. Between 2004 and 2008, as a postdoctoral fellow with Department of Clinical Sciences, Dr. Roman-Muniz coordinated livestock worker training opportunities for Hispanic dairy workers. In August of 2008, Dr. Roman-Muniz became the new Extension Dairy Specialist at Colorado State University. Dr. Roman-Muniz experienced travel difficulties and was unable to participate in the panel on the day of the session.

**Valentin Sanchez** is an experienced Outreach/Community Educator for Oregon Law Center's Indigenous Farmworker Project. Sanchez is trilingual in Mixteco, Spanish, and English. For the past 4 years and along with other indigenous community educators within the Project, he has planned creative methods for gaining input from the indigenous communities regarding their occupational health and safety issues and for cocreating solutions involving the communities themselves.

**Nargess Shadbeh, JD**, is the Oregon Law Center's Farmworker Program Director. She received her JD from Northwestern School of Law of Lewis and Clark College in 1985. She was recently awarded a Wasserstein Fellowship from Harvard Law School, an award recognizing lawyers who distinguished themselves in public interest work. She is the Principal Investigator in a multidisciplinary project focused on improving occupational health and safety of indigenous farm workers in Oregon funded through the National Institute for Occupational Safety and Health (NIOSH).

**Trang Vu, MS**, is a Senior Response Officer with the Texas General Land Office Oil Spill Prevention and Response Program. He joined the Texas General Land Office in December, 1992, and has been with the Oil Spill Program

for over 15 years. As a Vietnam native, he uses his knowledge of language and culture to work with commercial fishermen along the Texas coast in order to prevent oil spills. He also assists the local U.S. Coast Guard Commercial Fishing Vessel Safety Program to convey safety messages to the Vietnamese fishermen. He has been an instrumental team member for the development and delivery of a NIOSH-funded safety training and work life intervention project for Vietnamese shrimpers in the Gulf of Mexico. Mr. Vu immigrated to the United States in 1983 and received his Bachelor of Science degree in Petroleum Engineering from the University of Tulsa in Tulsa, Oklahoma, and his Master of Science degree in Petroleum Engineering from Texas A&M University in College Station, Texas.

## PROCESS AND DISCUSSION

Dr. Levin introduced each panelist by name and their affiliation. Each member of the panel discussed their background, experience, and current work as well as key cultural factors to consider in working with agricultural populations to conduct research (Figure 1). The panelists provided examples and photographs from their own experiences (Figure 2).

Prior to introducing the panel members, Dr. Levin described a model of the operational stages of a research project involving the community beginning with an idea that becomes formulated into a research design. The source(s) of this idea may be variable, but under optimal circumstances, will be driven by priorities set by the community. Participants are recruited to the project, data are collected, and then deciphered into information to be fed back to the community. In turn, this feedback often informs interventions selected by the community and disseminated by opinion leaders, potentially resulting in change(s) that can be measured. Ongoing feedback to the participants and the population generates new avenues for research. This model is depicted by Figure 3. A set of questions for comment by panel members that aligned with these operational stages were prepared in advance with panel members' input. Individual

FIGURE 1. Dr. Jeffrey Levin (far left) introducing the panel session concerning Cultural Effectiveness in Research at the New Paths Conference in Cle Elum, Washington, November 11, 2008. (Figure appears in color online.)



panel members stepped forward and agreed to discuss particular questions most relevant to their own experience and work, giving particular emphasis to cultural influences and considerations. Of course, multiple panel members could and did respond to several of the questions.

During Dr. Levin's remarks, the audience was also encouraged to submit written questions as well as consider verbal comments/questions for panel members. Written questions were collected and read/offered to the panel by Dr. Doyle. The prepared questions and those submitted by the audience in writing are compiled in Table 1, where selected answers and corresponding panelists are also noted. There was not time for the panel members to respond to all of the questions. Hence, Table 1 demonstrates gaps in responses for some questions. Selected questions and responses along with key successes are indicated below.

### *Selected Questions (Q) and Answers (A)*

- Q:** What factors/strategies are most important to building trust in a target population?  
**A:** Trang Vu responded by recognizing that the commercial fishing industry is heavily

regulated by the government and the population tends to be reluctant to participate in research because they fear more regulations. Vu stated that the challenge is to find someone that the fishermen are comfortable with to help make connections within the community. He concluded by saying that it takes a long time for them to be comfortable with the idea of participating in research.

Valentin Sanchez expressed the importance of not only knowing the language, but understanding the culture and the type of work that the people are performing. He recommended that researchers not promise anything to the population because they will remember if you do not deliver and that can jeopardize trust.

Sam Byrd said that the community advisory board helped in his area. In addition, they hired young people from the community and offered them an opportunity to develop their careers. They built trust by knocking on doors. The Director himself knocked on every door. Byrd recommends that leaders get out in the community.

FIGURE 2. Photographs provided by panelists from their own experiences in performing outreach and working with research populations (top left—crop harvest by migrant and seasonal farmworkers, photo courtesy of the National Center for Farmworker Health provided on behalf of Mr. Byrd; top right—milking in a parallel dairy parlor provided by Dr. Roman-Muniz; bottom left—community input from indigenous farmworkers provided by Ms. Shadbeh from the project, “Promoting Occupational Health and Safety of Indigenous Farmworkers”; bottom right—life ring toss skills training for Vietnamese commercial fishermen along the Gulf Coast provided on behalf of Mr. Vu). (Figure appears in color online.)



**Q:** What role do you think incentives should play in community-based participatory research (CBPR)? When conducting CBPR, how do you engage a busy population without extra resources that encourage them to participate?

**A:** Trang Vu recommended that researchers identify and respond to the needs of the group. He suggested offering safety equipment or training that will benefit them in their work.

Sam Byrd added that you should give them information that they can use. He

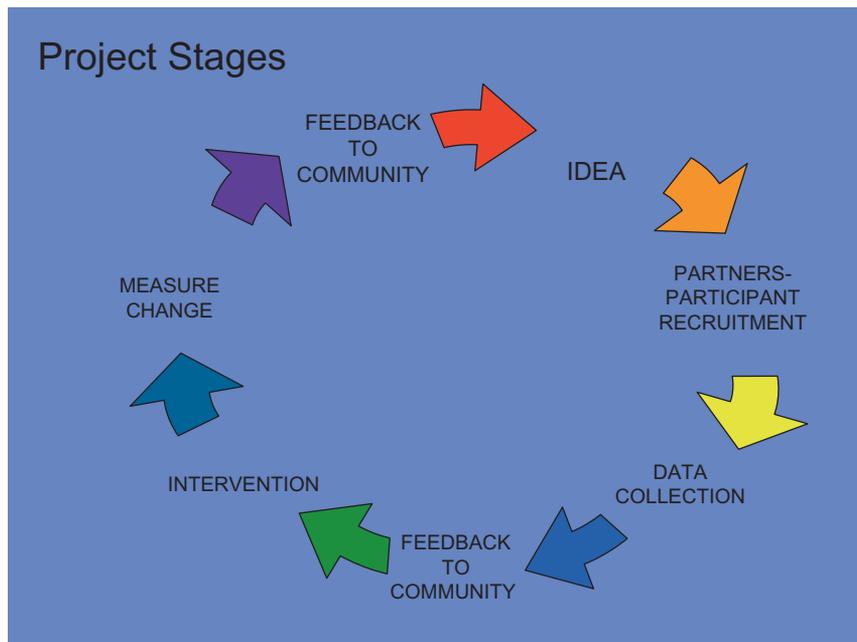
recommended using less jargon and communicating with the population on their level. In addition, he stated that it is important to let them tell you how much they want to know.

Dr. Eva Doyle suggested that researchers should identify and spend time with the people that the community goes to for information.

**Q:** What are some challenges you have experienced with translation?

**A:** Trang Vu responded by explaining that the workers don't have time to take

FIGURE 3. A model of the operational stages of a research project involving the community. Note the circular nature whereby research ideas ultimately provide feedback to the community and serve to inform new avenues for useful investigation. (Figure appears in color online.)



classes. In the Vietnamese culture, parents value education. He suggested that workers should identify a person in their group that can help with the language barrier. He recognized that language remains a big issue. Sometimes fishermen call a friend when their boat is on fire instead of the U.S. Coast Guard. By the time their friend arrives, the boat is destroyed and the crew is in the water.

**Q:** How do you deal with “patrones”/employers that make it very difficult to approach the workers?

**A:** Valentin Sanchez spoke of challenges related to collecting survey information from work sites. He recommended that researchers distribute surveys at locations where people are not working and not afraid of retaliation from employers. From his experience, people were more honest and open when they were not being supervised.

**Q:** How do researchers performing field studies share their findings/deliver results back to participants and the community?

**A:** Nargess Shadbeh stated that she has been using a multidisciplinary approach for about 4 years and expected to continue in this mode. However, she admitted that they had not made much progress. The population remains patient and they have expressed their appreciation for her work.

Sam Byrd was not in favor of this approach. In his experience it has not been appropriate. The workers are usually in survival mode and dealing with basic life and death issues. He stated that we need to demonstrate that we can produce, not so much by giving, but by being advocates.

### *Successes*

Among several questions discussed, the panel members present were asked to identify and describe what each viewed as their key success relative to cultural considerations and their work in community research activities. Their comments are summarized below.

**Sam Byrd.** Byrd explained that, in spite of many years of effort to improve resources for

TABLE 1. Prepared Questions and Questions from the Audience (Where Indicated) for the Panel, in Keeping with the Operational Stages of a Research Project Involving the Community

Operational Stage	Question	Panelist(s) (agreeing to answer)	Response Themes (and respondents)
Idea	How do populations advocate for or stimulate research ideas? What are the cultural influences for what we elect to study?	Byrd	Qualitative questions lead to unexpected answers. The most impact comes from the ideas of the community. (Byrd)
Recruitment	How do populations perceive research?	Roman-Muniz	
	What factors/strategies are most important to building trust with your population?	Shadbeh, Vu	There is reluctance to participate in research due to fear of regulations. (Vu) Know the language, understand the culture and the work, and keep your promises. (Sanchez) Hire community members and knock on doors. Get out in the community yourself. (Byrd)
	What factors determine the decision to participate? Barriers?	Byrd	Involve the community advisory board in every aspect including design of the research instruments and method of recruiting. Use community members that they are comfortable with as field researchers. (Byrd) The potential participants do not have time to do anything else but work. (Vu) The world they live in is survival. (Shadbeh)
	Who influences the decision to participate?	Roman-Muniz, Vu	Use a trained community member who speaks the language and understands the culture to present the idea, and provide opportunity for input. (Shadbeh)
	When conducting participatory research, how do you engage the interest of the community members if they are busy and have no extra resources (i.e., financial), without offering something tangible in return? (Audience)		Address an issue that is truly a priority of the community. Offer training that is a benefit to them. (Vu)
	What role do you think incentives should have in community-based participatory research (monetary or otherwise)? (Audience)		Respond to needs and offer safety equipment/ training that will be of benefit. (Vu) Give them useful information they want and use less jargon. (Byrd) Spend time with the people the community goes to for information. (Doyle)
Data Collection	How do you know if the question asked is interpreted in the intended manner?	Vu	Identify a person in their group that can help them with a language barrier. (Vu)
	What are some challenges you have experienced with translation?	Shadbeh, Roman-Muniz	Difficulty communicating well (Shadbeh)
	What influences honesty of response or receptivity to testing?	Byrd, Shadbeh, Vu	Providing a service to the community (Byrd)
	Is written translation worthwhile?	Shadbeh, Roman-Muniz	
	How do you deal with "patrones"/employers that make it very difficult to approach the workers? How do you deal with tensions that may exist between different cultural groups within an organization and/or community? (Audience)		Distribute surveys at nonwork locations to avoid fear of retaliation. (Sanchez)

(Continued)

TABLE 1. (Continued)

Operational Stage	Question	Panelist(s) (agreeing to answer)	Response Themes (and respondents)
Feedback	When is the best time in the process to provide feedback?	Byrd	This should be a continuous process. Engage the community advisory board as part of what you do on an ongoing basis. (Byrd)
	What is the best format to provide feedback?	Shadbeh, Vu	
	How do students/academic researchers performing field studies and others share their findings/deliver results back to participants and the community? Strategies? ( <i>Audience</i> )		Use a multidisciplinary approach. (Shadbeh) Demonstrate productivity through advocacy. Hire young people from their community, growing and training them into a new career as a field researcher. (Byrd)
Intervention	How is the intervention selected? Who selects the intervention?	Roman-Muniz	The community advisory board decides which information to use for intervention and in which community to first begin. (Byrd)
	Who are the opinion leaders? Change agents? <sup>8</sup>	Vu, Shadbeh	The person from whom they get their source of information—Ask the community. (Doyle)
	What factor(s) should researchers consider to identify opinion leaders? Change agents?	Byrd	Identify people the community trusts and respects. (Vu)
Measuring Change/ further Feedback	How do you motivate ongoing participation? Strategies?	Shadbeh	Collaborate with other community partners to obtain information via focus groups. (Shadbeh)
	What cultural factors may influence failure to change?	Vu	
	What do study participants want/expect as a result of participating in the study?	Byrd, Roman-Muniz, Vu	Responding to needs by placing the needs of the people before the needs of doing the research. (Byrd)
	How does one garner the resources necessary to “give back” to the community after “taking data”? ( <i>Audience</i> )	Byrd	Give the community information they can use and have faith that they will do what they need to by engaging them in what is relevant to them. (Byrd)

*Note.* Panel participants originally agreeing to respond to prepared questions are indicated. Audience questions directed at specific panelists are also indicated. Response themes and corresponding respondents are noted. Due to time constraints, not all questions could be asked and answered, resulting in response gaps.

Hispanic agricultural workers in Idaho, there continue to be significant gaps in participant benefit from research. He expressed skepticism over an iterative process of safety and health improvement.

Byrd recommended looking to the community to provide unexpected answers that ultimately result in a positive impact. He further suggested focusing more on people than the programs, sharing his positive experience in Idaho by responding to the needs of the people before the needs of the research, allowing the community to

take the lead. This was accomplished by using an engaged community advisory board that helped design the research instruments and is now actively participating in the intervention phase.

An example of success in revealing unexpected needs was through the involvement of the community on the question of top health conditions affecting Hispanics. The predicted answer was diabetes, but the community response was human immunodeficiency virus (HIV). Follow-up that focused on HIV led to further

opportunities through which women's health issues such as cervical cancer were explored. Community members were trained to teach relevant curriculum. Providing the opportunity for community input was critical to obtaining unexpected and significant answers and results.

**Valentin Sanchez.** Sanchez offered an example of a young pregnant indigenous woman being asked to enter an agricultural field where pesticides were recently applied. She expressed concern to the grower who became more informed about risks associated with pesticide exposure in these circumstances and reassigned the task to another worker. This also led to the development of an awareness program for employees.

**Nargess Shadbeh.** Shadbeh offered an example of success whereby providing community opportunities for input was critical in successfully identifying that sexual harassment in the field was an occupational health and safety issue. This was identified in a focus group led by a trained speaker of the indigenous language. She added that, if the subject of research is a priority of the community, participation will be higher. She was complimentary of how the agricultural workforce had become increasingly engaged in research efforts to improve trust and access to safety measures at work.

**Trang Vu.** Vu commented on the Vietnamese shrimp fishermen he had worked with in a NIOSH-supported research project along the Gulf Coast. In an effort to improve receptiveness to safety training aboard commercial fishing vessels, he felt that offering hands-on experience in Vietnamese has been instrumental in the success of the project.

## CONCLUSIONS

Panel members were able to draw upon their experiences as researchers and agricultural work-

ers to describe research challenges related to access, trust, language, culture, and participant benefit in agricultural populations. Interaction with the audience culminated in the identification of successes relative to these worker populations.

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