### Public Art, Service-Learning, and Critical Reflection:

*Nuestra Casa* as a Case Study of Tuberculosis Awareness on the U.S-Mexico Border

Eva M. Moya,

University of Texas at El Paso

> & Guillermina G. Núñez,

University of Texas at El Paso This case study describes the Nuestra Casa (Our House)
Initiative, an advocacy, communication, and social
mobilization strategy to increase tuberculosis (TB) awareness
through a public art exhibition hosted at the University of
Texas at El Paso. This work describes this multi-disciplinary
initiative that cut across academic boundaries to engage
faculty, students, and community members in service-learning
and community engagement efforts. Nuestra Casa reached
diverse audiences, including school children, farm workers,
promotoras (health promoters), university students, educators,
persons affected by TB, and public health officials in Mexico
and in the United States through education, critical reflection,
and a call to action.

uberculosis (TB) remains a major global health and social problem. The disease ranks as the second leading cause of death from an infectious disease globally, after HIV (WHO 2012). Although most cases of tuberculosis can be treated, every minute, four people die from the disease and fifteen more become infected worldwide (Harrington et al., 2011). According to a 2012

World Health Organization (WHO) report, there were nine million new cases of tuberculosis in 2011 and 1.4 million deaths.

Tuberculosis typically affects the lungs but can also affect other parts of the human body. The disease is spread through people who have the disease (active pulmonary) expelling bacteria when they cough. People with diabetes and HIV are more susceptible to tuberculosis, and men are more likely to become infected with the disease more than women. Tuberculosis is also more prevalent among adults in economically productive age groups (CDC 2010). If tuberculosis is not treated, a high mortality rate is probable. This is a case study that describes the Nuestra Casa (Our House) Exhibit, an advocacy, communication and social mobilization strategy to increase the awareness of tuberculosis (TB) through public art as a medium for education and social engagement. This work describes the genesis and the evolution of this project, as a multi-disciplinary initiative that cuts across academic boundaries to engage faculty, students, and community members in service-learning and community engagement efforts. The goal was to extend beyond the traditional communication frames associated with academia to critically engage diverse audiences, including school children, farm workers, promotoras (health promoters), university students, educators, persons affected by TB, and public health officials. This project was in alignment with the University of Texas El Paso's (UTEP) mission, to ensure access, along with a commitment to excellence reflected in academic rigor and by preparing students to make significant contributions to their professions, their communities, and the world. Critical to the *Nuestra* Casa exhibit was the participation of students through servicelearning efforts, which helped the Nuestra Casa project become an eleven-month initiative in a museum setting, reaching more than 25,000 visitors from January to December 2012. The Nuestra Casa initiative provided multiple communication events that helped make tuberculosis and its social-economic and environmental ties, a more visible health disparity along the U.S.-Mexico border.

The authors' collaboration in the 2011 Nuestra Casa Project took place as part of a continued collaboration of an earlier Nuestra Casa Tuberculosis awareness project that took place at UTEP in the fall of 2009. At this time, Eva Moya was a doctoral candidate

researching tuberculosis and HIV/AIDS as part of her dissertation. In the fall of 2011, the authors collaborated in an interdisciplinary project to help mount an exhibit at UTEP's Centennial Museum to bring awareness about Tuberculosis on the U.S.-Mexico border. Dr. Moya, a professor in UTEP's Department of Social Work, led the initiative of bringing colonia-type homes, typical of dwellings occupied by Tuberculosis patients in modest income communities to the UTEP campus. Others participating in the project were Dr. Guillermina Gina Núñez from the Department of Sociology and Anthropology, Dr. William (Bill) Wood from the Centennial Museum and Chihuahuam Desert Garden, Dr. Arvind Singhal and Dr. Lucia Dura from the Department of Communications, Dr. Silvia Chávez Baray from the Department of Social Work, and Jennifer Rodriguez and Azuri Ruiz from the Center for Civic Engagement at (UTEP).

This interdisciplinary effort was made possible in great part to the participation of students from various disciplines including social work, anthropology, health sciences, and communication. The students involved in the project learned how to use ethnographic methods, such as participant observation and qualitative data analysis, and museum fundamentals such as mounting and facilitating During their service-learning experiences, a museum exhibit. students gained valuable health science research experience, as well as critical thinking and communication skills. In her final paper, Sheila Droustas, an undergraduate student at UTEP reflected, "this project allows for students to learn and be completely aware of TB. It allows for students to know how such problem can affect border cities." Students indicated that their service-learning experiences led to a deeper understanding of the social stigmas and social inequalities associated with Tuberculosis. Diego Davila, an undergraduate student noted, "I decided to participate in the Nuestra Casa Initiative because I like the idea of being part of a museum exhibit that would involve a public health issue. I decided to volunteer because I wanted to do something that involved meeting new people, learning new things, and getting out of my comfort zone" (End of the semester service-learning report 2011, personal communication on file with authors). Through this awareness, students and participants of the exhibit expressed a need for more public health education.

The exploration and analysis of social-economic factors contributing to TB created a heightened sense of social responsibility among participating students, faculty, staff, and community partners. Critical components to the success of this initiative involved the collaborative process, which focused on engaging audiences of various social-cultural, linguistic, and educational backgrounds, through effective communication using various forms of literacy: video, photos, wristbands, postcards, handouts, and other tools for reflection. This work provides a description of the *Nuestra Casa* exhibit and how this initiative developed over the span of one year to engage students, faculty, and staff across the disciplines in a university setting with the intent of engaging diverse audiences in education, advocacy, and social change.

The engagement of students in this initiative also involved working with multiple forms of communication or multi-modal literacies, which included social media such as Facebook, Youtube, and a museum as a critical space for engaging others in dialogues and actions addressing health inequities and social justice on the U.S.-Mexico border. The *Nuestra Casa* exhibit included pictures, videos, and participants' responses to the exhibit, public health information flyers, bracelets, commitment index cards, Youtube videos, Facebook, and a website. The use of social media became an integral part of the organizers' efforts to use various forms of communication, to inform the public about the museum exhibit and for reaching more people across class, educational, professional, and national boundaries.

Among the most significant outcomes of this work has been the engagement of participants in the evolution of this project and in the co-creation of knowledge through engagement and interactions that elicited responses and actions towards dispelling social stigmas of Tuberculosis, poverty, and health inequities on the U.S.-Mexico border (Moya et al, 2012). As Mario Loya, a UTEP student who visited the exhibit, noted:

After visiting the Centennial Museum and spending a good amount of time learning about the *Nuestra Casa* exhibit, I was able to enhance my knowledge about tuberculosis. Through the eyes of victims of this horrific condition, I have opened

my eyes and my heart to understanding them and being able to comprehend what a person must go through when diagnosed with tuberculosis. There were various observations I took into account when walking into the *Nuestra Casa* exhibit, among those were the space and how the different things and artifacts were located, the emotional and moving quotes around the exhibit and of course, the stories of the unfortunate. (Personal communication on file with authors "Observations at the Centennial Museum," Fall 2012).

# EDUCATION, ADVOCACY, AND SOCIAL CHANGE: TUBERCULOSIS ON THE U.S.-MEXICO BORDER

Health and disease are unequally distributed across populations. Tuberculosis for example, is more likely to impact low income communities of color and in the U.S.-Mexico border region; this means Mexican-origin populations. The U.S.-Mexico border is at high risk of elevated TB and HIV incidence, due to socioeconomic stress, rapid and dynamic population growth, mobility and migration (Finch et al. 2001; Moya, Loza & Lusk, 2012; Moya et al., 2013). Singer and Baer (2012) define health disparities as "disproportionate or excess morbility, mortality, and decreased life expectancy as well as unequal access to health care and other health-supportive resources in disadvantaged groups in society or in the world at large" (p. 176). Understanding and challenging these health disparities requires the use of multiple forms of literacies to reach audiences as learners, as co-producers of knowledge, and as agents of social change.

The Nuestra Casa Project focused on bringing awareness to the various aspects associated with Tuberculosis as a highly stigmatizing and taboo disease. This project was significant in making the invisible visible, by providing visual representations of the housing and living conditions associated with poverty, marginalization, and unequal development on the U.S.-Mexico border (Núñez and Klamminger 2010; Núñez 2012). The built environment has direct consequences on the health and well-being of low-income and ethnic communities such as Latinos (Moya et al., 2013). In this project, museum participants were able to examine various layers of the built environment in which people living with tuberculosis: the household, the community, and in this project in particular, the

U.S.-Mexico border region. Living in close proximity with a person with tuberculosis is likely to expose family members to the virus. Consequently, crowding and higher densities of people living in condensed spaces with limited ventilation is likely to contribute to the greater vulnerability of low-income communities.

This project is also noteworthy, given its regional, national, and international impacts. Regionally, on the U.S.-Mexico border, this project travelled from El Paso, Texas to Cancun Quintana Roo, Oaxaca, Tijuana, B.C., Reynosa, Tamaulipas Mexico and Atlanta, Georgia. The exhibit travelled to the 40<sup>th</sup> Union World Conference on Lung Health: Poverty and Lung Health in Cancun, Mexico, December 3-7, 2009, which brought together health professions from various countries. In Atlanta, Georgia, the Nuestra Casa Exhibit was located in the Center of Disease Control and Prevention Global Odyssey Museum, where TB controllers from all over the United States and more than 3000 guests toured the exhibit. Data analysis of the responses to the Nuestra Casa exhibit in Atlanta indicate visitors' messages of sympathy, fear, love, and the need for more awareness, social justice, social action, advocacy, and culturalsocial connections (Sheila Droustas, service-learning undergraduate student and museum co-curator 2012). One visitor of the exhibit, who studied at Duke University at the time, named Marcus noted: "This exhibit inspired me to research TB on my own to better understand the causes, effects, and how it damages the body. Now, I want to be a scientist and work for the Center for Disease Control." These responses by visitors in Atlanta are significant, given the rise of immigrant populations in the southern United States, who are more likely to face discrimination and social stigmas that are likely to contribute to barriers in health care access and provision (Berdhal et.al 2007; Redstone Akresh 2009.) Future researchers should examine the fears and stereotypes associated with the increased immigration in the South and how immigrants and non-immigrants engage one another in negotiations of health care.

## SHORT BACKGROUND OF THE NUESTRA CASA EXHIBIT'S FIRST VISIT TO UTEP IN 2009

Nuestra Casa resulted from the need to reinforce public health efforts for the prevention and control of tuberculosis in Mexico. The

Nuestra Casa (Our House) exhibit was a traveling exhibit designed to promote the awareness of tuberculosis. The goals of the mobile exhibit were to fulfill the social commitment to recognize and put into perspective the TB problem, to increase the political will to improve prevention efforts, to show how the disease was being addressed by public health officials, and to reduce the stigma and discrimination experienced by the persons affected by TB. Another key goal of the Nuestra Casa exhibit was to reach various audiences, including decision makers, health care providers, and the public in general as a call to action to get people involved in taking concrete steps to prevent the spread of TB and to reduce the number of cases and deaths caused by the disease. This initiative stemmed from the need to reinforce the advocacy, communication and social mobilization efforts for the prevention and control of TB in Mexico and in the United States (Moya 2009).

The exhibit was built in the form of a three-dimensional house or "shack" to reflect the life and stories of people affected by tuberculosis, their surroundings, and their expressions of everyday life dealing with TB. The images and testimonies within the exhibit communicated a number of topics, including family, social stigmas, poverty, faith, and hope. The exhibit was intended to represent a low income household in a *colonia* (neighborhood) from the U.S.-Mexico border. Colonias represent uneven development on the margins of large urban centers throughout the U.S.-Mexico border. These settlements are prone to poverty, and in particular, lack solid and liquid waste disposal services. Interestingly, colonia homes much like the exhibit were visible along the Interstate I-10 directly across from UTEP.

Realizing that the community and real-life situations of persons affected by TB was necessary if efforts to combat the disease were going to be effective, a novel approach was developed through "The Shack." Damien Schumann, a photojournalist and committed social activist from South Africa, first constructed "The TB/HIV Shack" in 2007, to recreate a typical South African low-income dwelling, to raise awareness about the settings in which TB and HIV/AIDS coexist. The Shack was presented at important national events, including the 38<sup>th</sup>

Union Conference on TB and Lung Health in South Africa in 2007 and the 2008 AIDS Conference in Cancun Quintana Roo Mexico.

During several months of planning and field work in 2009, Schumann collaborated with people affected by TB and TB Photovoice participants, health providers, public health authorities, and community based organizations in five border cities: Tijuana, Baja California; Reynosa and Matamoros, Tamaulipas; Ciudad Juarez, Chihuahua; and El Paso, Texas. Schumann documented the experiences of people living with TB, their families, their medical providers along the border, the social and environmental conditions that contribute to the development of the disease, and sharing the positive factors of the surroundings. These visits and interviews resulted in demonstrating the poor living conditions, limited ventilation, and limited access to health care facilities. The testimonies and photographs Schumann gathered became part of the mobile exhibit, which also contained personal items from individuals affected by TB who expressed their goal of sharing their experiences so that "other people not live through what they had suffered."

As a public art exhibit, the *Nuestra Casa* project exposed the social realities and environmental conditions of TB. By creating an exhibit in the form of a "model-home" for TB, participants were able to learn from the stories and testimonies of people living with TB. These narratives had different themes, including stories of sadness, alienation, faith, resilience, and empowerment. The images and testimonies of people with TB also provided insights not easily accessible to the public, including images of the medications TB patients take, the physical deterioration TB has on the human body, and the items associated with the day to day management of TB treatments, such as face masks, gloves, syringes, and personal care items.

Nuestra Casa is a movable house mainly constructed out of wood and materials easily found in *colonia* communities. It is easily dismantled and can be transported in sections or panels. The entire exhibit collapses down for transportation in a small moving truck. It is assembled in a few hours, following the guide manual and video with complete instructions. The house consists of a living room, kitchen,



Image of Nuestra Casa. Photo courtesy of Eva Moya. 2010.

bathroom, a hallway or Corridor of Hope (Camino de la Esperanza), and a small patio at the main entrance. In this setting, the life stories of persons affected by TB are presented in the forms of images, videos, and household items. Standing, its dimensions are approximately 33 x 23 feet and its height is 9.5 feet. For shipment, the disassembled panels and the furniture require three pallets of 8.5x5.7 feet and 6 feet in height. In addition, the tin roof panels are 3x13 feet.

# USING A CLOTHESLINE TO ENGAGE PARTICIPANTS AND CAPTURE THEIR REFLECTIONS

When Dr. Eva M. Moya first gathered her collaborators to introduce Damien Schuman's *Nuestra Casa* to her colleagues at UTEP in 2009, the collaborating faculty discussed ways of engaging broader audiences in critical reflection. Through a creative and collective brainstorming session, Guillermina G. Núñez recommended the addition of a *tendedero* or a clothesline that would capture the exhibit's visitors' thoughts and opinions after walking through the exhibit. The goal was to engage the audience immediately after they had walked through the *Casa* and were exposed to the images, stories, and various "artifacts" providing messages of the devastating impacts of tuberculosis on the human body, on families, on children, on people with HIV, on caretakers, and other people most affected by

the disease. Moya suggested that remnants of white linen cloth left over from a previous project be used for the *trapitos* (pieces of cloth). One undergraduate student, Priscilla Portillo, printed out words in bold such as "hope," "justice," "disease knows no borders," in laminated sheets added to the *tendedero* to highlight dominant themes represented in the exhibit's participants' responses. The trapitos were critical for capturing the emotional and cognitive elements of the exhibits' visitors/participants. As one visitor from Oaxaca, Mexico noted, "Nuestra Casa me tocó el corazón. Me abrieron los ojos a esta enfermedad. Que bueno que vine a ver esto." (Nuestra Casa touched my heart. You opened my eyes to the illness. So glad I came by to see it).

The participants of the *Nuestra Casa* exhibit were invited to provide their reflections on white pieces of linen cloth. The comments and reflections were collected at each *Casa* tour site in Mexico and the United States and were later coded as representative themes for each city. In Mexico, the *Nuestra Casa* exhibit was displayed in Cancun, Tijuana, Oaxaca, Reynosa, and,in the United States, the exhibit was displayed in El Paso, Texas and Atlanta, Georgia at the Centers for Disease Control (CDC).

## NUESTRA CASA'S RETURN TO UTEP AFTER A BINATIONAL TOUR IN 2011-2012

In 2011, the *Nuestra Casa* exhibit was brought back to the Centennial Museum at UTEP by Dr. Eva M. Moya, with support from the director of the CDC Global Odyssey Museum. The Centennial Museum is located in a strategic location on campus at the corner of a heavily transited intersection, leading to the Undergraduate Learning Center and the university's library. Students were asked to help conduct content analysis in the 2011 fall academic semester, and in January 2012, Damien Schumman, Dr. Eva M. Moya, the staff at the museum, and volunteers mounted the *Nuestra Casa* exhibit at the Centennial Museum. The exhibit was on display from January 17<sup>th</sup> to December 21, 2012. The return of the exhibit was significant in helping to reignite the community's interest and engagement in Tuberculosis awareness and public health education efforts. The exhibit of a shantytownstyle home located inside the gallery was an eye-opening experience for more than 25,000 annual visitors. The



Image of trapitos on the tendedero (exhibit participants' reflections on the clothesline), courtesy of Eva Moya. Note bold typed messages on the tendedero contributed by Priscilla Portillo, UTEP undergraduate student, 2009.

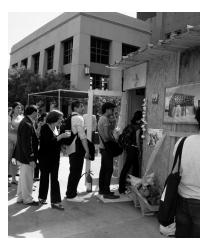
exhibit housed images and video testimonies of people struggling to survive TB while living in impoverished conditions. Counters at the entrance of the exhibit and sign in sheets were used to keep track of the number of visitors at the museum. As former Centennial Museum director, Dr. Bill Wood, indicated, "Thousands of people





Inside of the Nuestra Casa. Photos by Damien Schumann, artist and creator of the exhibit, 2009.





The Nuestra Casa exhibit and the trapitos as tools for reflection and community/participant engagement at UTEP. 2009. The Nuestra Casa photo on left was taken by UTEP Communications office and the trapitos photo on the right was taken by Eva M. Moya.

learned about the continuing problem of TB and the social stigma that people with TB suffer by visiting UTEP, walking through the doors of the Centennial, and looking at the exhibition" (Velarde 2012). As one anonymous Spanish speaking exhibit participant noted, "La comunicación es importante. Por miedo a preguntar hay muchas personas que mueren. Muchas felicidades por darnos a conocer a cerca de TB" (Communication is important. Due to the fear of asking, many people die. Congratulations for letting us know about TB).

Traditionally, museums are places where artifacts are on display behind cases that limit the visitors' interactions. The exhibit allowed for the creation of a space that brought members of the community together to learn about, confront, and deal with difficult issues. The *Nuestra Casa* exhibit went beyond the confines of the museum and engaged individuals in the community and across the globe, thanks to the power of electronic and print media, social networking, and community engagement (Valdez 2013). Social media outlets such as Facebook, Twitter and YouTube have allowed people to share images and provide feedback on the exhibit. The project's website, NuestraCasaInitiative.net, continues to provide a constant source of information, where visitors can find a brief history of *Nuestra Casa*, a photo gallery, and a call to action after the exhibit's conclusion. *The* 

Nuestra Casa Initiative videos that were produced by Diego Davila, a senior digital production major from UTEP, has received more than 500 views, while the Nuestra Casa Youtube video describing the initiative's development by artist Damian Schumann, has more than 900 views. Other online media outlets such as RioGrandeDigital.com and <a href="https://www.comminit.com/democracy-governance">www.comminit.com/democracy-governance</a> featured stories about the exhibit's efforts to educate the public about TB. UTEP's student newspaper, The Prospector, published stories about Nuestra Casa in its print and online edition on Blip.tv (see Watts 2012). The report included reactions from UTEP students, including Jesus Sambrano, who credits Nuestra Casa with creating awareness about TB as a disease that is associated with developing nations and not as prevalent in the United States.

The various communication channels used in Nuestra Casa helped reach a broader audience than many academic journal articles and books. The multiple forms of communication which included stories, press releases, and media tips on the UTEP website about the project have received more than 10,000 hits. The story, *New Museum Exhibit Touches on TB*, is one of the most popular searched articles on UTEPNews.com, the University's official news feed. News stations KFOX 14, KINT 26 and Telemundo interviewed the project's organizers and ran stories that reached audiences on both sides of the U.S.-Mexico border.

The community impact of the Nuestra Casa exhibit also went beyond the University of Texas, El Paso's Centennial Museum as a "mini" version of *Nuestra Casa* and was displayed at the Mexican Consulate General of Mexico in El Paso for three weeks and was seen by hundreds of visitors. The exhibit was also part of the 25th International AIDS Candlelight Memorial Vigil, which received attention from local media, including the *El Paso Times*. The *Casa's* visit to the Mexican Consulate in El Paso was critical in developing a partnership between the Consulate and UTEP, who is now cosponsoring the *Ventanillas de Salud* (Windows to Health), an effort that places a health promoter within the Consulate to inform and engage Mexicans living in the El Paso del Norte border region.

## THE A,B,C,'S 1, 2, 3 OF CRITICAL REFLECTION AND ACTION THROUGH TRAPITOS

The Nuestra Casa became a service-learning opportunity for students enrolled in Guillermina Núñez's and Eva M. Moya's courses and students enrolled in other courses who sought service-learning opportunities. As a faculty collaborator to this project, Núñez provided training on qualitative coding and critical reflection. Students were instructed in identifying key themes throughout the analysis of 840 pieces of cloth (trapitos) with museum participants' comments and reflections written on them. As Sheila Droustas, an undergraduate student who did her service-learning on this project, indicated:

I was assigned to team Atlanta with Jesus Z and Veleria M. Each team was given a city with which to work. Each city had a different number of inspirational quotes. These phrases were transferred to a jump drive by a member of the Nuestra Casa team. The information on the jump drive had approximately three hundred quoted responses from the Atlanta, Georgia exhibition of Nuestra Casa. We read all of them and organized them by themes. The nine themes we found from Atlanta were: Awareness, Call for Social Justice, Call for Social Action, Advocacy, Cultural or Social Connection, Sympathy, Fear, and Love. We thought these were worthy of being hung in the UTEP Centennial Museum at the new Nuestra Casa exhibition. There were three people in our group, and we each picked twenty-two quotes. We had a total of four hundred and thirty-two trapitos with fifty four strings each with eight quotes or trapitos on them. We also looked up data on the city of Atlanta, Georgia. Josias C. is one of the other students working on this project. He put together a Casapedia. For each of the cities that the traveling exhibit visted, he put facts on the city together. We accessed the Casapedia through a link they gave us. We analyzed what we knew about Atlanta and we did research on our own as well. This research was incorporated into our final papers.

Student groups were divided to work on organizing and coding the *trapitos* collected from participants who had walked through the exhibit at the various locations inidicated earlier. They were to examine the

trapitos in the form of "notes from the field" to then organize and quantify repeated themes using qualitative codes (Murchison 2010; Wolfer 2007). The goal was to examine the responses elicited from Nuestra Casa participants from the six locations the exhibit had travelled to and then to present the key themes or "findings" in a smaller version of the original exhibit inside UTEP's Centennial Museum. The quotes were significant indicators of how people responded to Tuberculosis and to images and messages expressed within the exhibit. One exhibit visitor/participant noted,"I am now rethinking my career path so that I can do research to contribute to the efforts to combat TB. Also, I want to go abroad so that I can actively help out" (anonymous reflection written on a trapito during the Nuestra Casa exhibit in Atlanta, Georgia.)

Núñez also instructed students on the A,B,C's 1, 2, 3's of critical reflection as proposed by Welch (1999), which involves reflection on affect or emotions, behaviors, and cognition about self, community, and society at large. As students were reading and organizing the trapitos with the participants' responses and reflections on Nuestra Casa, they were asked to reflect on the most compelling quotes written and images drawn by the participants at the six locations (for additional details on the applications of the A, B, C,'s 1, 2, 3's of critical reflection in service-learning, see Núñez 2012). students' reflections were continuously and reiteratively incorporated throughout the mounting of the exhibit in the Centennial Museum in 2011. This reciprocal engagement of students, faculty, staff, and community partners with the materials generated by visitors from the various locations motivated students to want to know more about Tuberculosis and the communities where this disease is more likely to spread. In their analyses, participating students and faculty reflected on the vulnerability and the inequities that impact lowincome colonia residents. One key observation students discussed is that colonia residents living on the outskirts of cities in non-metro areas are less likely to have access to health care (see Berdhal et. al 2007 for a discussion of Tuberculosis exposure and barriers to health care impacting Latino communities in non-metro areas).

The impact of *Nuestra Casa Initiative* on the exhibit's participants and collaborators was visible in the critical reflection and analysis done

of the *trapitos*. In September of 2011, Nuñez facilitated a training workshop to teach students how to qualitatively code *trapitos*. Students were divided into teams and each team was assigned a location in which the exhibit had previously travelled to. Students were asked to list and quantify the quotes and key themes represented in the *trapitos*, to then select a representative sample to help mount the next step of the *Nuestra Casa* Museum exhibit at UT El Paso's Centennial Museum. After coding the *trapitos*, the team of student researchers worked with Eva Moya, Damien Schumann, and museum staff members to mount the *Nuestra Casa* Museum Exhibit for the spring of 2012.

The museum exhibit included a sample of trapitos from various locations where *Nuestra Casa* had been exhibited. These representative samples were organized and mounted on long pieces of cloth in the form of long strips. These strips were organized to create a "forest" of strips to represent trees or vines hanging from the ceiling — each representing a sample of common themes, quotes, and images. These hanging strips of clothes were at times overwhelming to go through, read, and digest. They were part of the path to *Nuestra Casa* and were meant to be a visual invitation and challenge to audiences to engage in the issue of Tuberculosis awareness. As UTEP undergraduate student, Mario Loya indicated:

I noticed in how the exhibit was spaced and distributed, the strings (trapitos) hanging from the ceiling that described people's stories and inspirational words about the exhibit. The way in which these strips were placed created a sense of protection to the exhibit that was located behind it (the house replica of a person with tuberculosis). It seemed that the strings of trapitos worked as a defense mechanism that one is encountered with almost instantly when entering the exhibit. One enters into a world of protection, without first knowing what the exhibit is all about. This tells a lot of people who have entered the exhibit beforehand, for it tells that there exists compassion and the will to improve and help these victims of tuberculosis (2012 personal communication on file with authors).

Materials on TB were also available in the form of handouts to provide visitors with additional information on the disease. For example, one of the handouts was cut in the form of a lung, and had information in Spanish and English about how to prevent TB. These various materials were evidence of the project's organizers' efforts to employ multiple forms of communication to engage people of various literacy, educational, and linguistic backgrounds.

Common themes expressed in the *trapitos* by the exhibit's participants included outrage towards social-economic injustices impacting health, the need for more education/awareness, empathy towards people living with TB, and a heightened sensitivity to the physical and social stigmas and repercussions of living with TB. Some of the most powerful quotes came from people who had lived in similar conditions in poverty, right across from UTEP in Ciudad Juarez. One trapito read, "This is a similar house to the one I grew up in right across the border." Another one read, "My tia (aunt) lives in a house much like this one; it's hard to believe the similarities." The trapitos helped capture evidence of compassion and empathy that spoke to the faith and motivation participants felt as they went through the exhibit. Expressions of faith and motivation, such as "Que Dios los ayude y los bendiga" (God help you and bless you), and "Know you are not alone, your strength and determination act as inspiration to others." Many comments expressed outrage that this disease is still impacting the poor and the most vulnerable. One of the most poignant messages on a trapito read: "It is not until someone in Congress gets TB that people will begin to care about this disease." The trapitos became a sounding board for people of various professions and life experiences from health professionals, university students, farm workers, health promoters, and school-age children.

Visitors to the museum and collaborators who participated in the *Nuestra Casa* exhibit engaged in dialogues about the role of education, public health, advocacy, self-care/human agency, access to care, social inequities in health care, the role of poverty, awareness of risks, hope/faith-shared empathy, expressions of sympathy and well-being, and encouragement (See <a href="http://www.youtube.com/watch?v=HJTyOry-KSI">http://www.youtube.com/watch?v=HJTyOry-KSI</a> for a short video of Nuestra Casa participants, organizers, students, and survivors). Participants expressed wanting to learn

more about TB and wanting to take precautions to avoid being exposed to TB. Some discussed specific behaviors and recommended steps to prevent TB such as hand washing, covering one's mouth when coughing using an arm and not hands, and informing others about TB. As part of the exhibit, participants were also invited to fill out postcards as personal commitments of personal action, commitment, and willingness to participate healthy practices (e.g. covering mouths, seeking medical care, etc.). The relationships that were developed through this effort contribute to what Cella, Rivera, and Rinaldo (2011) refer to "a tactical orientation" that is "grounded in hope as a critical, active, dialectical engagement" that is "composed of many voices" (p. 3). The museum became a critical space for community engagement and critical reflection, and for deliberating future actions on a personal, familial, community, regional, and binational level for the students, faculty, staff, and people living with TB, public health officials, and many others involved.

### CONCLUDING REMARKS AND FUTURE RESEARCH EFFORTS

The need to explore multiple forms of venues, literacies, and forms of public engagement is critical for bringing about public health education and ultimately structural social change. Participants reflected on the presence of the exhibit as a critical component to change. As one visitor/participant noted, "The spirit of change starts with your presence here at Nuestra Casa" (Anonymous participant at the Union International Conference on Tuberculosis and Lung Health, Cancun Mexico, 2009). As Singhal notes, "Nuestra Casa is one of the finest examples of how a university connects with a community on an important public health issue and does so with the engagement of the students, faculty, and with aesthetic sensibilities and curating performativity," (as quoted in Velarde 2012). Accompanying the exhibit were education, research, policy and service activities in support of the Nuestra Casa Initiative, which garnered the support and collaboration of students, faculty, TB survivors, and other members of the community interested in issues of health and social justice. The initiative also garnished significant attention from the media and the off-campus community and has received a regional award and a national award nomination at the time of this publication.

Future research efforts that involve interdisciplinary teams bring out the various forms of research and communication assets that can be applied to reach broader and more specific audiences. Although as academics, we are well aware of the benefits of publishing academic products such as books and journal articles, the reality is that the majority of the people we wish to engage does not have access to these materials. This is as Eva Moya often indicates, "a call to action to invite others to become uncomfortable," in seeing misunderstood, stigmatized, and shadowed populations currently living with TB and HIV. These vulnerable populations are most often impacted by structural inequities and poverty that can be mediated when we create awareness and public responses to health disparities.

To engage the public in issues pertaining to public health, socially stigmatizing diseases, and social inequalities, scholars are required to think and act beyond traditional forms of communications most often associated with academic-knowledge production venues such as journal articles and books. This project has taken a public health concern such as Tuberculosis, which has been traditionally associated with "developing countries," and has exposed the social and ecological realities of this disease to people in various formats, languages, and images, reaching multiple audiences of various literacy levels and areas of expertise. This effort is a testament that museums, community settings, and diplomatic settings such as consulate offices, can develop opportunities to open up to and engage populations previously ignored and underserved. This initiative also placed TB and the persons affected by TB in public forums, on political and social agendas, and as a priority health concern. This exposure of Tuberculosis information created sensitivity and a heightened level of awareness among participants and research collaborators that did not previously exist in the El Paso del Norte border region. Nuestra Casa is an example of what can be done when public health, art, communication, the social sciences, education, and communities come together to bring about social justice and social change. Future researchers are invited to consider exposing other socially stigmatizing and taboo health issues and concerns through engaging and reflective art exhibits that make use of multiple channels of communication, such as photography, video, fabric, and other forms of graphic arts to reach audiences of multiple language and literacy levels.

Eva M. Moya is a native of the U.S.-Mexico border. Eva, (Ph.D. University of Texas at El Paso, 2010) is Assistant Professor in the Department of Social Work at the University of Texas at El Paso. A specialist in U.S.-Mexico and border health, she has more than 30 years of professional experience in the border region. Dr. Moya has published a number of papers on health disparities and infectious diseases in México and the U.S.-Mexico Border Region. She is the co-editor and co-author of the Social Justice in the U.S.-Mexico Border book (2012). Her expertise includes border health; tuberculosis and stigma, HIV/AIDS, Photovoice, intimate partner violence, sexual and reproductive health, and community health workers. Eva conducted studies throughout the world during her tenure as a Kellogg National Leadership Fellow.

Dr. Guillermina G. Núñez-Mchiri is an Associate Professor in the Department of Sociology and Anthropology at UT El Paso, where she teaches courses in cultural anthropology, urbanization, food and culture, and applying anthropology via engaged research projects in the community. She is originally from Salinas, California and grew up as child of migrant farm workers crossing borders between the U.S. southwest and Mexico. She received her PhD in Cultural Anthropology from the University of California, Riverside in 2006. Dr. Núñez-Mchiri was the recipient of the 2012 University of Texas Regents' Outstanding Teaching Award. In 2013, she became the Provost's Faculty Fellow for Civic Engagement at UTEP and a Faculty Fellow for Innovation and Change for the Southern Education Foundation.

#### **ACKNOWLEDGEMENTS**

We wish to thank the number of people and organizations who have made the Nuestra Casa Exhibit and initiative possible. Initiative Partners and Planning Team: Dr. Silvia Chávez Baray, Diocesan Migrant & Refugee Services, UTEP's Department of Social Work, Dr. Lucia Durá, Department of English and the Social Justice Initiative, Azuri Gonzalez and Jennifer Rodriguez, Center for Civic Engagement Director, Dr. Eva M. Moya, Department of Social Work and Project Concern International, Dr. Guillermina "Gina" Nuñez-Mchiri, Department of Anthropology and Sociology, Raquel del Consuelo Orduño, TB Photovoice, Damien Schuman, Artist, Designer & Photographer, Dr. Arvind Singhal, Department of Communication and the Social Justice Initiative. Rocio Sarahi Solis. Center for Civic Engagement, Dr. William "Bill" Wood, Centennial Museum and Department of Anthropology and Sociology, Kaye Mullins, Centennial Museum, Dr. Kathleen Curtis, College of Health Sciences and Dr. Diana Natalicio, UTEP President and sponsor.

Student Leaders: Michelle Alvarado, Enrique Botello, Josias Castorena, Patricia Odette Carrete, Diego Dávila, Sheila P. Droustas, Erick Fontanez, Karla Luján, Raquel del Consuelo Orduño, Rocio Sarahi Solis, Crystal Ulibarri, Jesus Zambrano, Efren Solorzano, Marcela Verona, Lorelie Moya, Leah Diaz, Eurydice Saucedo, Centennial Museum photographer, Laura Marquez, Guadalupe Marquez, Valeria Mendoza.

Community Partners: Alliance of Border Collaboratives (ABC), Project Concert International (PCI), - USAID Mexico, Mexican Consulate in El Paso, TB Photovoice, Solución TB (Strengthening Observe Therapy) Linking Up Community-Based Integrated Outreach Networks for TB Control), Programa Nacional de Tuberculosis Secretaria de Salud (CENAVECE), Centers for Disease Control and Prevention Global Odyssey Museum, RESULTS International, Heartland National TB Center, City of El Paso Department of Health, International AIDS Empowerment, Centro Sin Fronteras, Pan American Health Organization, and Texas State Department of Health and Human Services.

### VIDEOS TO LINK TO THE JOURNAL'S WEBSITE:

Nuestra Casa Project (Updated in 2013). <a href="http://www.youtube.com/watch?v=HJTyOry-KSI">http://www.youtube.com/watch?v=HJTyOry-KSI</a>. Produced by Diego Davila and Dr. Eva Moya.

Nuestra Casa Initiative. Youtube video produced by Diego Davila, UT El Paso. Uploaded January 13, 2012. <a href="https://www.youtube.com/watch?v=JGm8hfH4Nbc">https://www.youtube.com/watch?v=JGm8hfH4Nbc</a>

Nuestra Casa. Tuberculosis Advocacy. Uploaded November 14, 2009. https://www.youtube.com/watch?v=ddguIAKNBDs

Union World Conference 2009: Nuestra Casa. <a href="https://www.youtube.com/watch?v=VZ8cKc1I">https://www.youtube.com/watch?v=VZ8cKc1I</a> Y

#### REFERENCES

- Berdahl, T. A., Kirby, J. B., & Torres Stone, R. A. (2007). Access to health care for nonmetro and metro Latinos of Mexican origin in the United States. *Medical Care*. 45(7), 647-654.
- Cella, L., Rivers, N., & Rinaldo, M. (2011). Re-assessing sustainability: Leveraging marginal power for service-learning programs. *Reflections*. 10 (1), 1-22.
- Centers for Disease Control and Prevention. (2001). Preventing and controlling tuberculosis along the U.S.-Mexico border: Work group report. *Morbidity and Mortality Weekly Reports*, 50(RR1), 1-12. Web. Accessed September 5, 2009. Retrieved from <a href="http://www.cdc.gov/mmwr">http://www.cdc.gov/mmwr</a> Centers for Disease control and Prevention (CDC). (2010). Retrieved October 26, 2010, from CDC Tuberculosis Statistics: <a href="http://www.cdc.gov.tb/report.htm">http://www.cdc.gov.tb/report.htm</a>
- Davila, D. Mi Casa es Tu Casa: The Nuestra Casa Experience. (2011). Final paper on service-learning experience for introduction to cultural anthropology. Unpublished document on file with authors. El Paso, TX.
- Droustas, S. (2012). Our House: A Place of Inspiration and Hope. (2012). Final service-learning/co-curator report for Anthropology 3358: Ethnographic Methods. Unpublished manuscript. El Paso, TX.
- Finch, B.,H., Robert A., Kol, B., & Kolody, B. (2001). The role of discrimination and acculturative stress in the physical health of Mexican-origin adults." *Social Sciences and Medicine*. (23), 399-429. Print
- Harrington, M., Morgan, S., & Syed, J. (2011). Tuberculosis research and development. *Stop TB Partnership*, TB/HIV Project. New York: Treatment Action Group. Print.
- Loya, M. (2012). Reflections of the *Nuestra Casa Exhibit*. Anthropology 3358: Ethnographic Methods. Personal communication on file with authors.
- Moya, E. M. (2009). Nuestra Casa handout on the origins of the exhibit..
- Moya, E.M., et.al. (2013). U.S.-Mexico Border (La Frontera): Challenges and opportunities in rural and border health. In Charlene A. Winters, PhD, APRN, ACNS,-BC (Ed.), *Rural*

- *Nursing: Concepts, Theory and Practice* (4<sup>th</sup> ed.). Springer Publishing.
- Moya, E.M., Loza, O., & Lusk, M. W. (2012). Border health: Health inequities, social determinants and the case of Tuberculosis and HIV. *Social Justice in the US Mexico Border Region*. Netherlands: Springer Science. Print.
- Murchison, J.M. (2010). Ethnography essentials: Designing, conducting, and presenting your research. San Francisco: Jossey-Bass.
- Nuestra Casa-Tuberculosis Advocacy. Youtube Video: <a href="https://www.youtube.com/watch?v=ddguIAKNBDs">https://www.youtube.com/watch?v=ddguIAKNBDs</a>.
- Nunez, G. G. (2012). Writing while participating: Incorporating ethnography in service-learning across the curriculum. In I. Baca (Ed.), Service-learning and writing: Paving the way for literacy (ies) through community engagement. (83-105). Leiden, The Netherlands: Brill.
- Nunez, G. (2012). Housing, colonias and social justice in the US Mexico border region. In M. Lusk & E.Moya (Eds.), Social justice in the U.S. - Mexico border region. (109-125). Dordrecht, Netherlands: Springer Science.
- Nunez, G. G. & Klamminger, G. (2010). Centering the Margins: The Transformation of Community in Colonias on the U.S.-Mexico Border. In K.Staudt, C.M. Fuentes, & J.E. Monarrez Fragoso (Eds.), The Paso del Norte metropolitan region: Global inequalities, cities, and citizens at the Mexico-U.S. Border. (147-172). New York: Palgrave Macmillan.
- Redstone A., I. (2009). Health service utilization among immigrants to the United States. *Population Research and Policy Review.* 28 (6), 795-815.
- Singer, M. & Baer, H. (2012). *Introducing medical anthropology: A discipline in action.* 2nd. Ed. Lanham, MD: AltaMira Press.
- Tuberculosis Statistics: <a href="http://wwww.cdc.gov.tb/statistics/tables.">http://wwww.cdc.gov.tb/statistics/tables.</a>
- Valdez, D.W. (2013, July 5). UTEP Professor leads vorder TB awareness campaign. In *El Paso Times*. <a href="http://www.elpasotimes.com/news/ci\_23602439/professor-leads-border-tb-awareness-campaign">http://www.elpasotimes.com/news/ci\_23602439/professor-leads-border-tb-awareness-campaign</a>. *El Paso Times*. Accessed July 27, 2013.
- Velarde, J. (2012, Jan. 10). New museum exhibit touches on TB." *Utepnews.com.* http://newsuc.utep.edu/index.php/news-latest/114-new-museum-exhibit-touches-on-tb

- Watts, A. (2012, Feb. 6). Nuestra Casa'photos bring stories alive. The Prospector. Updated, Friday, May 17, 2012. Accessed at <a href="http://www.utepprospector.com/nuestra-casa-photos-bring-stories-alive-1.2768638">http://www.utepprospector.com/nuestra-casa-photos-bring-stories-alive-1.2768638</a> Accessed September 10, 2013.
- Welch, M. (1999). The ABCs of reflection: A template for students and instructors to implement written reflection in service-learning." NSEE Quarterly, 25(2), 23-25.
- WHO. (2012). "World Health Organization's 2012 Report on Global Tuberculosis Control." Retrieved August 6, 2013, from World Health Organization: <a href="http://www.who.int/tb/publications/global\_report/en/">http://www.who.int/tb/publications/global\_report/en/</a>
- Wolfer, L. (2007). Real research: Conducting and evaluating research in the social sciences. Boston: Pearson.