



MEZCOPH PUBLIC HEALTH POSTER FORUM

March 29, 2019

A Showcase for Student Research & Community
Engagement featuring Oral Presentations by Delta Omega

**SCHOLARSHIP
PRIZES FOR
STUDENT
PRESENTERS**

Health Sciences Innovation Building

Poster Session: 1:00 - 3:15

Keynote Panel: 3:30 - 4:20

Awards: 4:20 - 4:30

Reception to Follow

KEYNOTE PANELISTS



**SYDNEY PETTYGROVE,
PHD**



**MABEL CRESCIONI,
DRPH**



**HEATHER CARTER,
EDD**



**Mel & Enid Zuckerman
College of Public Health**

**The Mel and Enid Zuckerman College of Public Health
University of Arizona**

presents

The Public Health Poster Forum

The purposes of this forum are:

- **To promote and critique student research,**
- **To network and promote collaboration,**
- **To increase skill building opportunities, and**
- **To introduce students to public health research and public health community engagement.**

SCHEDULE OF EVENTS

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11:00-12:00 Delta Omega Oral Presentation Session

HEALTH SCIENCES INNOVATION, 1st FLOOR

12:00-1:00 Poster presenters sign-in and set up

1:00-3:15 Poster presentations and judging

HEALTH SCIENCES INNOVATION, 1st FLOOR

3:30-4:20 Keynote panel presentation:

**Discussion on Border and Migrant
Health**

4:20-4:30 Presentation of awards:

**Announced by Dr. Jeff Burgess, Breanne
Lott, and Jill De Zapien**

**4:30 Reception for poster forum and admitted
students day**

ACKNOWLEDGEMENTS

This event was made possible by the generous support of many facets of the university community. We give warm thanks to:

Associate Dean Dr. Jefferey Burgess,

Office of the Associate Dean for Research

Assistant Dean Chris Tisch,

Office of Student Services and Alumni Affairs

Department of Community, Environment and Policy

Department of Epidemiology and Biostatistics

The University of Arizona Bookstores

Graduate and Professional Student Council



THE UNIVERSITY OF ARIZONA
BookStores



GRADUATE &
PROFESSIONAL
STUDENT COUNCIL

Delta Omega Judges:

Lynda Bergsma, PhD

Maia Ingram, MPH

Lindsay Koehler, PhD

Public Health Poster Forum Judges:

Dr. Xiaoxiao Sun

Dr. Lindsay Kohler

Dr. Alicia Allen

Dr. Leslie Farland

Dr. Uma Nair

Dr. Nicole Yuan

Dr. Joe Gerald

Dr. Kacey Ernst

Dr. Katherine Ellingson

Dr. Stephanie Rainie

Dr. Melissa Furlong

Jennifer Peters

Linda Dingle

Rose Nguyen

Brian Eller

Kim Tham

Nicholas Cogdall

Lee Itule-Klasen

Mary Kinkade

This event was made possible as a result of the enthusiasm and hard work of the members of the Public Health Poster Forum Planning Committee.

Delta Omega Planning Committee

Breanne Lott, Alpha Nu President

Amanda Wilson, Alpha Nu Vice President

Mario Trejo, Alpha Nu Secretary

Public Health Poster Forum Committee

Jing Zhai, Co-chair

Ashley Lowe, Co-chair

Alesia Jung, Abstract & Poster Coordinator

Stephanie Lashway, Abstract & Poster Coordinator

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Andrew Hermanski, Facilities Coordinator

Sarah Gruza, Facilities Coordinator

Michael Tearne, Staff Advisor

Marc Verhougstraete, Faculty Advisor

Keynote Panel Speaker :

Sydney Pettygrove, PhD

Dr. Pettygrove is an epidemiologist with expertise in the surveillance and epidemiology of birth defects and developmental disabilities, and environmental epidemiology. Dr. Pettygrove has been the epidemiologist for the Arizona Developmental Disabilities Surveillance Program (ADDSP) since 2001 and has been the Principal



Investigator of the program since 2008. She has also served as the epidemiologist for the Arizona Muscular Dystrophy Research and Surveillance Program (AMDSRP) and the Arizona Fetal Alcohol Syndrome Surveillance Network (AZ FASSNet). Dr. Pettygrove also serves as an Assistant Professor in the MEZCOPH department of Epidemiology and Biostatistics.

Keynote Panel Speaker :

Dr. Mabel Crescioni

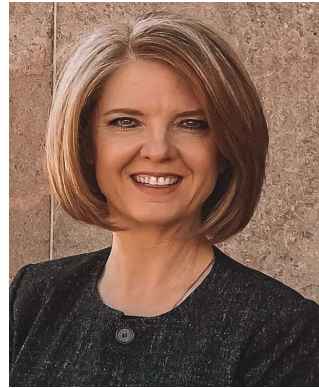
Mabel Crescioni, DrPH is currently Associate Director, Research at the Hemophilia Federation of America (HFA). Mabel is also an Instructor at the Mel & Enid Zuckerman College of Public Health, where she teaches “Public Health Policy and Management” and a Professor of Practice at the James Rogers College of Law where she teaches “Clinical Research Ethics” both at the University of Arizona (UA). Prior to joining HFA, Mabel was the Director of the Electronic Patient-Reported Outcome (ePRO) Consortium and Assistant Director of the Patient-Reported Outcome (PRO) Consortium at the Critical Path Institute (C-Path). Following a post-doctoral fellowship at the UA College of Medicine’s Department of Ophthalmology, where she worked on a longitudinal study of refractive error among Native American children validating PRO measures for children who receive spectacle correction, Mabel was an Assistant Professor at the UA College of Medicine. In addition, she has served as consultant to state and tribal health departments, health centers, and other health-related non-profit organizations. After completing her BA in Communications at Rutgers University, Mabel earned a JD at Interamerican University of Puerto Rico, an LLM in Health Care Law at Saint Louis University, and a Doctor of Public Health (DrPH) at the UA. Prior to joining the UA, she also served as Health Policy Advisor to the Governor of Puerto Rico.



Keynote Panel Speaker :

Dr. Heather Carter

Heather Carter, Ed.D is an Assistant Professor of Practice at the University of Arizona Mel and Enid Zuckerman College of Public Health and is a member of the Arizona State Senate representing District 15. Before serving in the State Senate, Heather was a member of the Arizona House of Representatives for 8 years, where she was Chairman of the Health Committee for 6 years and Vice Chairman two years prior. Currently, Heather serves as the Vice Chair of the Senate Health and Human Services Committee, Chair of the Higher Education and Workforce Development Committee and member of the Appropriations Committee. Heather has a strong track record of sponsoring legislation that solves complex state issues, with a focus on health care and education policy. Heather has earned a distinctive reputation of working closely with her constituents to pass important and effective legislation.





Delta Omega

Honorary Society in Public Health

Oral Presentation Abstracts & Participants

Tariq Alqahtani

“Salinomycin and its Derivative as Potent RET Inhibitors”

Gabriela Barillas-Longoria

“Implementing the Active School Neighborhood Checklist in the SNAP-Ed Schools”

Koby Jargstorf

“Microgreenery and Health In The Urban Environment”

Nidal Kram

“An Innovative Approach to Increase Entry into Prenatal Care in Santa Cruz County”

Meghan Skiba

“Prebiotic Supplement Use and Colorectal Cancer Risk in Post-Menopausal Women”

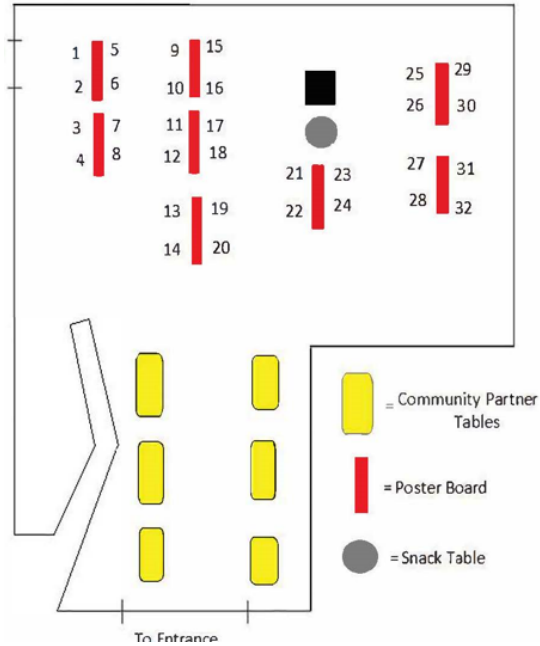
Abstracts located in the Public Health Poster Forum Abstract pages

***denotes Oral Presenter Abstract**

Public Health Poster Forum

**List of Poster Presentations,
Abstracts
&
Participants**

Quick-Reference and Map of Posters



1 Nidal Kram	17 Bridget Ralston
2 Nidal Kram	18 Valerie Madera-Garcia
3 Lisa Floran	19 Jessica Seline
4 Erin Pelley	20 Keegan Krause
5 Jessie Wrona	21 Elizabeth Anderson
6 Abby Lohr	22 Casey McKaughan
7 Preshit Ambade	23 Mandie White
8 N/A	24 Yanmei Hu
9 Ana Florea	25 Gabriela Barillas-Longoria
10 Natalie Shepp	26 Kathryn Cremer
11 Caitlin Meyer Krause	27 Christina Baum
12 Veronica Lugo Lerma	28 Meghan Skiba
13 Koby Jargstorf	29 Brenda Mbaabu
14 Agnieszka Radziszewska	30 Lauren Jaeger
15 Tariq Alqahtani	31 Cody Welty
16 Erin Hartnett	32 N/A

An innovative approach to increase entry into prenatal care in Santa Cruz County

***Nidal Kram**, Yara Castro, Katherine Selchau, Martin Celaya, Enid Quintana-Torres, Alexandra E Samarron

Introduction: In Arizona, women in Santa Cruz County (SCC) are at a greater risk for negative birth outcomes due to social and political factors associated with living in a border county. According to ADHS, in 2017, only 63% of women in SCC accessed prenatal care services (PNCS) within the first trimester compared to 76% of women statewide. Studies conducted to understand the barriers to access PNCS in the first trimester found that women at the border region were often unaware of their pregnancy status and therefore did not seek services until later in the pregnancy.

Methods/Activities: To increase the utilization of PNCS in the first trimester among women in SCC, the Mariposa Community Health Center, formed partnerships with multiple stakeholders to develop a technological platform (chatbot) that promotes PNC and other clinic services among youth 14-24 years of age.

Results/Outcomes: This presentation will discuss lessons learned from multiple stakeholders including clinic staff, university and state health department experts, funders and intended users. We will also discuss building the chatbot starting with the Google Design Sprint process to identify the target audience, determine an intervention type, develop, and test prototypes. Moreover, we will showcase results from prototype testing and discuss the utilization of state and clinic data to drive decision making and develop indicators for measuring project success. The chatbot is currently in the testing phase and is anticipated to go public in SCC by April 2019.

Discussion: Initial testing indicates great potential for the chatbot to increase utilization of PNC and other Mariposa clinic services.

Challenges to HIV service delivery for the prevention of mother to child transmission

Nidal Kram, Breanne E. Lott, John Ehiri, Victoria Yesufu, Mobolanle Balogun, Halimatou Alaofè, Olayinka Abosede, Juliet Iwelunmor

Introduction: In 2016, Nigeria had more new pediatric HIV infections than any other country, accounting for 26.9% of all mother-to-child transmission cases in the world (UNAIDS, 2017). In Nigeria, prevention of mother-to-child transmission (PMTCT) services are decentralized and delivered through primary health centers as part of comprehensive antenatal care. Coverage of these services is poor; a third of HIV-positive women receive testing and treatment during pregnancy.

Methods/Activities: To better understand the challenges of delivering PMTCT services from the provider perspective we conducted nine focus groups as a part of a phenomenological qualitative study. Data were collected from 59 health professionals working in primary care facilities in Lagos.

Results/Outcomes: Findings indicate challenges can be grouped into categories based on three types of interactions: 1) interactions between patients and individual providers, 2) patients' experiences with the healthcare system, and 3) provider experiences with the healthcare system. Providers discussed general challenges related to HIV care like stigma and discrimination, and barriers unique to pregnant women including domestic abuse, fear of separation/divorce and social isolation.

Discussion: Solutions to overcoming challenges may inform future implementation of PMTCT, a high-impact global health strategy.

“We Can’t Suspend Our Way Out of This:” Addressing the Rise in Adolescent Vaping

Lisa Floran

Introduction: E-cigarettes are now the third most commonly used illegal substance by high schoolers, outpaced only by alcohol and marijuana. At Pima County Teen Court, a diversion program for arrested youth ages 12-17, offenses increasingly involve e-cigarettes. This poster explores drivers of adolescent e-cigarette use in order to provide recommendations beyond criminalization and regulation.

Methods/Activities: A literature review of more than 30 sources was conducted to compile local and national data on adolescent e-cigarette use, factors contributing to adolescent substance abuse, and local/national e-cigarette efforts currently underway. Pima County Teen Court served as a case study and resource for substance abuse screening and intervention.

Results/Outcomes: A 2018 survey of Pima County youth showed that more than 40% have tried e-cigarettes. Top motivations for using illegal substances included having fun; feeling good; dealing with stress; and trying something new. While 73% say that disappointing their parents is a factor in their decision not to use drugs, only 39% talked with their parents about tobacco in the past year.

Discussion: Punitive responses can reduce youth access to e-cigarettes, but communities must also address other contributing factors: curiosity, ignorance, acceptability, stress, and addiction. Public health efforts should account for identified risk and protective factors. Full recommendations from this project will be shared with Pima County Teen Court to incorporate into their wellness processes and workshops.

Saludable: Investigating Factors Influencing Latino Children's Health

Erin Pelley, Celina Valencia, Cecilia Rosales

Introduction: Metabolic diseases are a growing concern in the United States, particularly among the Latino population. The literature shows that factors such as toxic stress and food insecurity are challenges facing the Latino community, and may contribute to health disparities. Mindfulness-based stress reduction has emerged as a promising method to interrupt the link between toxic stress and metabolic disorders, but has not yet been utilized in the community setting with Latino children.

Methods/Activities: This project involved the implementation of a pilot intervention study, entitled *Saludable*, which aimed to teach Latino children mindfulness techniques along with health topics with the hopes of preventing future chronic disease. The program took place in two locations: Aguila, Arizona, and the City of South Tucson, Arizona; the research team was thus able to compare differences in food access and stress between children living in both rural and urban settings. Focus groups with parents of the children were conducted in order to qualitatively determine factors affecting the children's mental and physical health.

Results/Outcomes: The *Saludable* program was associated with decreased levels of elevated cholesterol glucose in program participants. Focus groups revealed that both rural and urban participants' families live in food deserts.

Discussion: The community setting can be used to teach Latino children mindfulness techniques that may decrease their risk of metabolic disorders. Future research should be done to determine food policies that can increase Latino children's access to nutritious meals.

Barriers to Improving Access to Water, Sanitation and Hygiene in Rural Tanzania

Jessie Wrona, Ruvini Samarasinha, Given Mwambope, Irene John, Aminita Kilungo

Introduction: Poor Water, Sanitation and Hygiene (WaSH) practices poses significant threats to individuals in rural Tanzania, contributing to diarrheal diseases and malnutrition for children. The study assessed status and barriers to improving access to WaSH.

Methods/Activities: Six focus group sessions were held within village areas in rural Tanzania (Ifakara), with a total of 31 households ($N=31$). Each session comprised five to six female heads of households with children under the age of five. Focus group sessions collected information on water access such as retrieval distance, reliability, cost, safety, and behavioral aspects such as proper hygiene practices. Participant responses were analyzed to understand and identify gaps and challenges.

Results/Outcomes: Findings indicate 69% of participants had water safety knowledge, with only 44% of these individuals treating their water (i.e. boiling, chlorination, WaterGuard, filtration). Participants expressed major challenges to water access (even when water was available) including reliability (45% of participants), high cost (20% of participants), time it takes to fetch water due to distance or long queues (20% of participants), and hardware issues (15% of participants). 62% of participants use toilet facilities shared by multiple households.

Discussion: Results indicate a majority of the population does not have access to improved water and sanitation, and even those with education do not ensure drinking water safety. In these communities, even when water is available there are many other challenges including: access, reliability, availability, retrieval time, and cost.

Community Health Workers and the Opportunity to Improve Migrant's Mental Health

Abby Lohr, Cynthia Espinoza, Alma Valles, Maia Ingram, Ada Wilkinson-Lee, Scott Carvajal

Introduction: Individuals who migrate experience stressors that can impact their well-being such as adjusting to cultural norms. Because of historical, cultural conditions around vulnerability and emotion, Latinx migrants are concerned they will be judged for expressing negative emotions. Bilingual behavioral health workers are rare, some migrants may prefer not to share problems with translators, and many migrants have limited financial resources. Our setting and community partners are: Yuma County, Sunset Community Health Center, and Yuma County Health District.

Methods/Activities: In LINKS (Linking Individual Needs to Community and Clinical Services), CHWs foster collaboration between clinic and community sectors to improve access to chronic disease, emotional well-being, and social determinant services. With referrals from the clinic-based CHW, the community-based CHW identified participant priorities and adapted the intervention to their needs. Community partners led research development. The LINKS intervention has practical implications for the development of community-clinical linkage models in public health.

Results/Outcomes: LINKS CHWs discovered that their migrant participants were unable to access behavioral health services. In response, they referred participants to Loving Yourself which filled a common emotional well-being gap among migrant participants. A 7-session, support group-style program led by a CHW, Loving Yourself seeks to eliminate mental health stigma. LINKS is an ongoing project.

Discussion: Ongoing contact with CHWs plus the Loving Yourself curriculum helped individuals overcome stigma, integrate physical and emotional health, and address the stressors they face.

Decomposing caste-based disparities in India's national health insurance program

Preshit Ambade, Tauhidur Rahman, Smita Pakhale, Elizabeth Calhoun, Joe Gerald

Introduction: Casteism significantly affects healthcare access and health outcomes in India. Caste-based discrimination results in higher poverty rates and worse health outcomes in people at the lower-end of the caste hierarchy. The RSBY, a national health insurance program, was created to improve health care access for the poor.

Methods/Activities: This study has objective to measure caste-based disparities in RSBY enrollment in India and decompose the contribution of relevant factors in enrollment differentials for different caste groups. Using data from the 2015-16 National Family Health Survey, we compare RSBY enrollment rates for different caste categories (Scheduled Caste (SC), Scheduled Tribe (ST), and Other Backward Caste (OBC) against General Category households). We use non-linear extension of Oaxaca-Blinder decomposition and estimate two decomposition models, by pooling coefficients across the comparison groups and all caste groups. Enrollment differentials are decomposed into household head and individual characteristics, household level determinants, media access, and state-level fixed effects, allowing 2000 replications and random ordering of variables.

Results/Outcomes: Data on 698,901 households shows that ST households had the highest enrollment (20.0%) followed by SC (14.6%), OBC (10.8%) and General (9.5%) categories. Our models account for 40-93% of differential enrollments by caste. Household factors (44-74%) and state level fixed effects (34-40%) account for most of the gap in enrollment.

Discussion: Results confirm that caste influences access to RSBY in India. Higher RSBY enrollments among lower castes are significantly explained by their low socioeconomic status.

Ethnic Disparities in Gastric Cancer Presentation and Screening Practice in US

Ana Florea, Heidi E. Brown, Robin B. Harris, Eyal Oren

Introduction: Chronic infection with *Helicobacter pylori* is the strongest risk factor for distal gastric cancer (GC). While GC incidence has decreased, variation by race and ethnicity is observed. This study describes GC presentation and screening services among Medicare patients by race/ethnicity, place of birth, and history of GC-related conditions.

Methods/Activities: Using demographic, location and disease staging information, extracted from the Surveillance, Epidemiology, End Results – Medicare gastric cancer database (1997-2010), we compared frequencies of GC-related conditions (e.g. peptic ulcer, gastric ulcer) and screening (*H. pylori* testing and endoscopy) from inpatient and outpatient services claims by selected /ethnicity and place of birth.

Results/Outcomes: Data included 47,994 incident GC cases with Medicare claims. The majority (48.0%) of Asian/Pacific Islanders (APIs) were foreign-born, compared to Non-Hispanic Whites (NHWs), Hispanics and Blacks (with 64.4%, 33.9%, and 72.9% US-born, respectively). For NHWs, most frequently diagnosed GC site was the cardia (35.6%) compared to <15% ($P < 0.001$) for APIs, Hispanics and Blacks. While more than 57% of all cases had a history of GC-related conditions, *H. pylori* testing was reported in only 11.6% of those cases. *H. pylori* testing was highest for APIs (22.8%) and lowest for Blacks (6.5%).

Discussion: Non-cardia GC, associated with *H. pylori* infection, was diagnosed more frequently among APIs, Blacks, and Hispanics than NHWs. Testing for *H. pylori* was low among all GC cases despite evidence of risk factors for which screening is recommended. Studies are needed to increase appropriate testing for *H. pylori* among higher risk populations.

Evaluation of the Tucson Village Farm/El Rio Health FARMacy program

Natalie Shepp, Elizabeth Sparks, Leza Carter

Introduction: The FARMacy program began in 2017, and is a partnership between the University of Arizona Cooperative Extension's Tucson Village Farm (TVF), UA College of Medicine, and El Rio Health Centers. El Rio pediatric patients and their families are referred to TVF through a written prescription, to attend a FARMacy program, where they experience hands-on nutrition, gardening and culinary education, physical activity and mindfulness coaching and access to fresh food. In 2018, TVF 4-H Healthy Living Ambassadors (youth ages 14-18) were recruited and trained to lead the educational programs.

Methods/Activities: Participants were asked to complete an evaluation survey, assessing if they planned to use the information they learned during the program, at home. The teen facilitators were evaluated with the 4-H Common Measures instrument for Healthy Living Teen Leaders, and focus groups that were held at the end of their 5-month long commitment. These data will be utilized to determine if the program should be continued or expanded as a method of incorporating prevention education into traditional medical care practices.

Results/Outcomes: The vast majority of participants stated that they intended to make lifestyle changes, such as eating more fruits and vegetables, drinking less sugary drinks and more water, increase their physical activity and save money on healthy food items. Three more programs will be held in the spring of 2019.

Discussion: These results show that the educational components of the program are effective at convincing program participants to utilize simple strategies in their life to improve their health and that the model is worth pursuing for expansion.

Exploring Birth Preferences and Delivery Options to Improve Birth Outcomes

Caitlin Meyer Krause, Diana Jolles, Holly Valentine, Greta Cohn Gill

Introduction: Birth center prenatal care and delivery are shown to have improved maternal and infant birth outcomes for women without medical complications and should be utilized for women who prefer this method of delivery to improve population health. This project aims to understand birth preferences of patients and the design for prenatal care and delivery at a Federally Qualified Health Center (FDHQ). Pregnant women are randomly assigned to one of three options for prenatal care: the OB/GYN clinic with physicians, the Midwifery Clinic (MC), and the underutilized Birth Center (BC) with midwives. Most patients without medical complications deliver at a hospital, while those receiving midwifery care can deliver at BC. The goal of the project is to explore patient preferences and the FDHQ's prenatal care system to improve patient outcomes by matching preferences and medical risk factors to the care team.

Methods/Activities: Semi-structured interviews were conducted with women at the MC where most patients deliver at a hospital but medically qualify for BC delivery. From the preliminary data, surveys were created and completed by pregnant patients. Data are currently being analyzed.

Results/Outcomes: Preliminary results show that only 44% of those interviewed are aware of BC. Nearly 60% interviewed were interested or maybe interested in delivering at BC.

Discussion: The lack of knowledge of BC by medically qualified and interested patients adds to the underutilization of BC. Asking initial screening questions and providing information prior to prenatal care can guide patients to their appropriate care team and place of delivery. Utilization of BC and patient health would potentially improve.

Impact of a hand sanitizer with a residual effect on bacterial exposures

Veronica Lugo Lerma, Sasha R. Sepulveda, Amanda M. Wilson, Kelly A. Reynolds, Charles P. Gerba

Introduction: Some bacterial pathogens are transmitted via the fecal-oral route, and human exposure can occur through hand contacts with contaminated surfaces. Understanding the reduction in dose by using hand sanitizers with residual effects will inform hand hygiene protocols. The objective of this study was to use a simulation model to compare bacterial concentrations and doses during hand-to-mouth contacts for those with treated hands and those without treated hands over a 24 hour period.

Methods/Activities: A hand sanitizer with a residual effect was applied to one hand of participants, and the other hand served as a control. The concentration of indigenous hand bacteria were measured at 2, 4, 6, 16, and 24 hours after the single hand sanitizer application. Curves fit to experimentally measured concentrations on untreated (baseline) and treated (intervention) hands were used in quantitative microbial risk assessment equations to estimate bacterial dose during hand-to-mouth contacts.

Results/Outcomes: The average doses for a 24 hour exposure period were 1.13×10^7 colony forming units (CFU) and 5.37×10^4 CFU for baseline and intervention scenarios, respectively. The percent reduction in mean dose was 99.5%.

Discussion: The simulation demonstrates quantitatively that hand hygiene products with residual effects are helpful in reducing exposures. Further exploration into the influence of human behavior on hand hygiene efficacy is needed.

Microgreenery and Health in the Urban Environment

***Koby Jargstorf** and Shikhar Kumar

Introduction: Recent research has suggested that there is a link between the availability of large-scale green space and health in the urban environment. However, the relationship between microgreenery and the health of the residential populations in these urban environments are less well established. To illuminate this connection, this investigation builds on previous work by de Vries et. al. to investigate the correlation between quantity and quality of greenery, and health outcomes indicated by the 500 Cities 2016 dataset for Tucson neighborhoods.

Methods/Activities: For this investigation, preexisting data in the form of four data metrics from 15 randomly selected census tracts was compared against original data quantifying and qualifying greenery in the associated tracts. The specific metrics tested were self-reported census data on: poor mental health, poor physical health, leisure time physical activity, and number of nights with enough sleep. These data were compared by regression analyses to investigate the strength of their correlation, with the random selection of neighborhoods isolating the association of greenery with health outcomes.

Results/Outcomes: This research is still in progress and will be completed before the conference.

Discussion: If results follow the trend of greenery showing a positive association with health outcomes, these results might indicate that cities can positively impact the health of their citizens by relatively low-impact streetscaping activities. These would include the planting of street trees and the diversification and maintenance of existing micro-green-spaces in urban neighborhoods.

Screening for traumatic brain injury after intimate partner violence

Agnieszka Radziszewska, Maurice Lee, Paul Kang

Introduction: Social factors play a powerful role in determining health outcomes of patients and communities. In order to achieve a comprehensive view of the burdens facing individuals in the community we designed an open-ended survey where patients from free clinics (St. Vincent de Paul and Mercy Care), FQHC (Mountain Park Gateway and Maryvale) and private clinics (Desert Ridge and Family View)) could express their opinions.

Methods/Activities: Our primary aim was to identify the main barriers impeding patient populations in Phoenix from living the highest possible quality of life. Information obtained from three different clinic types included demographic information, open ended information on the top 3 patient identified needs, as well as an assessment of health literacy.

Results/Outcomes: A total of 300 patient surveys were completed; based on the responses 15 categories were identified amongst the patients. Overall there was a difference between clinic type and patient identified needs distribution ($p=.001$). We also collected information from providers in all three clinic types which will be presented in future research.

Discussion: There needs to be a change from treating disease oriented outcomes (DOEs) to Patient oriented outcomes that matter (POEMs). This survey was the first step towards gaining insight to what patients truly need to have the highest possible quality of life.

Salinomycin and its derivatives as potent RET inhibitors

***Tariq Alqahtani**, Vishnu Muthuraj Kumarasamy, Adam Huczynski, Daekyu Sun

Introduction: Medullary thyroid carcinoma (MTC) accounts for most mortality related to thyroid cancer, despite being relatively uncommon. Although MTC is characterized as indolent, it is still one of the most aggressive forms of thyroid cancer. Rearranged during Transfection kinase (RET) is a validated molecular target in medullary thyroid cancer. Activated RET proteins are considered to be the Achilles' heel of MTC, owing to the major contribution of germline mutations in the RET proto-oncogene to the development of this cancer. In this study, we introduce the potassium ionophore salinomycin as a potential therapeutic agent to target RET and its downstream signaling pathways.

Methods/Activities: TT and MZ-CRC- 1 both cells were used as a model for MTC while the normal thyroid cell (Nthy-Ori 3-1) used as control. Western blotting was utilized to validate the effect of Salinomycin in MTC cells. MTS assay and Caspase-3 assay were used to evaluate the cell viability and cell apoptosis, respectively.

Results/Outcomes: Salinomycin profoundly decreases RET expression by inhibiting RET transcription and the intracellular PI3K/Akt/mTOR signaling pathway. Salinomycin induces G1 arrest. RET reduction by Salinomycin can lead to LDL receptor-related protein 6 (LRP6) attenuation in MTC.

Discussion: The current study demonstrates that salinomycin possesses potent antitumor activity against MTC by reducing RET expression. Similar observations have been made with selected salinomycin analogs and known Wnt inhibitor niclosamide. All these features support further preclinical evaluation of salinomycin and its analogs as novel therapeutic agents for treatment of MTC.

A transitional clinic for the uninsured: Effects on chronic disease management

Erin Hartnett, Maurice Lee, Paul Kang

Introduction: Data on methods for stabilization and the establishment of long-term care in a medical home for uninsured populations is scarce. Currently, discharged uninsured patients face numerous barriers to follow-up care. This leads to costly visits to critical and emergency care facilities. This study intended to analyze the effectiveness of a novel system of transitional care from the St. Vincent de Paul free clinic (SVdP) to an FQHC as the long-term medical home for the uninsured population living with chronic diseases.

Methods/Activities: A retrospective chart review of diabetic patients transitioned from SVdP to an FQHC was performed. Hospital databases were reviewed for ED visits, hospital readmissions, and A1C levels. Phone surveys were conducted with transitioned patients regarding the transition and their experiences.

Results/Outcomes: 50% of these patients were able to successfully establish care with an FQHC after control was achieved while in the free clinic and after transition. Those who were able to establish care maintained that level of control at 6-12 months of follow up with an average initial A1C of 10.2%, time of transition A1C of 6.4% and post-transition A1C of 7.4%. Additionally, incidents of hospitalization after transition were reduced by 91% for all patients and Emergency Room usage was reduced by up to 79%.

Discussion: Free and charity clinics can be used as transitional clinics for the uninsured. If the clinic has the proper resources they can control a patient's chronic conditions and transition a patient who needs periodic 'check ups' to save money, but most importantly to avoid preventable complications of chronic diseases.

Screening for traumatic brain injury after intimate partner violence

Bridget Ralston, Jonathan Lifshitz, Jill Rable, Hirsch Handmaker, Todd Larson

Introduction: Intimate partner violence (IPV) causes harm to an estimated 42 million victims each year. Routine forensic examination excludes specific evaluation of traumatic brain injury (TBI), thereby missing an opportunity to diagnose and offer treatment. This project was designed to determine whether TBI signs are detected in IPV patients using existing forensic nursing protocols.

Methods/Activities: A retrospective review was performed on 19 strangulation cases collected over 31 days in June and July 2017 at the HonorHealth Mesa Family Advocacy Center. TBI signs and symptoms were cataloged from medical records to infer the incidence of TBI and inform an expansion of the nursing exam. Data were combined to determine frequency of symptoms, signs, and mechanisms of injury.

Results/Outcomes: Retrospective review identified a predominance of young (average age 32.3), female (89.5%) patients with obstetric history (76.5% with 1 or more pregnancy), presenting with symptoms including lightheadedness (84.2%), headache (78.9%), difficulty breathing (78.9%), and throat pain (68.4%). Subjective mechanism of injury included strangulation (100%), blow to the head with the perpetrator's hand (52.6%), and fall to the ground (36.8%).

Discussion: TBI signs and symptoms are common in victims of IPV as indicated by our sample population. Our team proposes expansion of the exam to ensure detection of TBI signs in IPV victims. The proposed expanded exam integrates near point of convergence, balance, and hand-eye coordination into the evaluation of IPV victims. By detecting TBI signs early, community efforts can guide patients towards recovery, appropriate treatment options and successful return to society.

Severity Perception of Malaria and Treatment-Seeking in Western Kenya

Valerie Madera-Garcia, Jenna Coalson, Kacey C. Ernst, and Melanie L. Bell

Introduction: Perception of malaria severity may affect the decision to seek treatment which is key to effectively manage malaria in endemic areas. The study objective was to determine whether perceived malaria severity was associated with treatment-seeking and with source of treatment (formal or informal) for febrile illness in lowlands and highlands of Western Kenya.

Methods/Activities: We analyzed secondary data from a cross-sectional study of households in Kenya from 2015. Multivariable logistic regression models were used to test associations between treatment-seeking and with source of treatment for febrile illness and total severity perception score (SPS) after controlling for other covariates.

Results/Outcomes: Increasing SPS was significantly associated with lower odds of treatment-seeking for febrile illness [$OR_{\text{Moderate SPS}} = 0.56$, 95%CI: 0.34, 0.93; $OR_{\text{High SPS}} = 0.32$, 95%CI: 0.19, 0.54]. In the highlands, increasing SPS was associated with lower odds of formal treatment-seeking amongst participants that sought treatment for febrile illness [$OR_{\text{Moderate SPS}} = 0.66$, 95% CI: 0.34, 1.29; $OR_{\text{High SPS}} = 0.25$, 95% CI: 0.10, 0.65]. In the lowlands, increasing SPS was associated with higher odds of formal treatment-seeking amongst participants that sought treatment at last febrile illness [$OR_{\text{Moderate SPS}} = 2.21$, 95%CI: 1.24, 3.95; $OR_{\text{High SPS}} = 3.57$, 95%CI: 1.94, 6.55].

Discussion: Perceived malaria severity was associated with treatment-seeking behaviors for febrile illness in the highlands and lowlands of Western Kenya. Understanding the drivers of treatment-seeking behavior after febrile illness are important to control malaria transmission.

The Health & Wellness Initiative: A Clínica Amistad Pilot Program

Jessica Seline

Introduction: Located in South Tucson, Clínica Amistad is a free clinic offering medical services to un- or under-insured patients. In efforts to continue providing the highest quality care to patients, Clínica Amistad piloted a health and wellness program.

Methods/Activities: Targeted qualitative interviews were conducted with a small sample of clinic patients in Fall 2018. Participants indicated interest in waiting room classes, specifically around nutrition and mental health. Secondary data from a 2017 survey was also analyzed. Bilingual health classes on topics including patient empowerment, nutrition, and stress, among others, were thus implemented in the waiting room. Partnerships with community organizations were also established, including outreach at a monthly food distribution event. By both providing direct health education and connecting patients with community resources, the Health & Wellness Initiative functions as both an individual and community-level public health intervention.

Results/Outcomes: An evaluation tool was developed for participants of all literacy levels to provide feedback. 92% of participants have reported finding waiting room classes valuable. Since September 2018, Clínica Amistad has also tabled at every monthly food distribution event.

Discussion: In addition to the provision of direct clinical services, it is worthwhile to incorporate efforts of health education and outreach in a clinical setting. The Health & Wellness Initiative also demonstrates the importance of addressing public health at multiple levels. Both individual and community-level interventions work together to strengthen health outcomes.

Using Whole Measures to Define Community Food Systems: STFS Report 2018-2019

Keegan Krause, Megan Carney

Introduction: The 2018-2019 State of the Tucson Food System Report uses the Whole Measures for Community Food Systems (2009) to engage stakeholders and address six values-based fields: Vibrant Farms, Healthy People, Justice and Fairness, Thriving Local Economies, Sustainable Ecosystems, and Strong Communities. This poster highlights the community-based data collection process from the report in the context of a values-based whole measures assessment tool, and offers commentary and recommendations moving forward.

Methods/Activities: Secondary data was collected from stakeholders in southern Arizona's food system for 8 weeks during October-November 2018. Upon coding data, follow-up qualitative interviews were done, supplemented by a variable-based review of peer-reviewed and grey literature through Web of Science and archived publications from the College of Agriculture and Life Sciences (CALs) at the University of Arizona.

Results/Outcomes: The report outlines the five key recommendations to improve the overall health of southern Arizona's food system moving forward.

Discussion: 1) Develop a binational applied research agenda; 2) Support more small-scale and beginning farmers and renewable energy; 3) Existing food policy councils should establish community-wide public fora, and initiate the value-based planning process; 4) Counties in southern Arizona should appoint councils and allocate the required resources to develop and implement integrated agrifood policies; 5) Improve the incorporation of social justice by addressing agriculture-related struggles of specific populations (i.e., refugees and immigrants, Latinx, Native American tribes, the urban poor) in southern AZ.

Validation and assessment of a student social justice attitudes and empathy tool

Elizabeth Anderson, Shannon Vaffis, Rebekah Jackowski, Terri Warholak, Elizabeth Hall-Lipsy

Introduction: While infrequently taught to health professions students in a formal capacity, the Center for Advancement of Pharmacy Education (CAPE) outcome measures include concepts related to social justice and empathy. This analysis assessed the validity and reliability of a social justice self-efficacy tool for doctor of pharmacy (PharmD) students.

Methods/Activities: Retrospective pre-post surveys completed by PharmD students at two schools of pharmacy were used to evaluate changes in social justice and professional empathy after a population health course. A partial-credit Rasch model was used to test for unidimensionality, person and item fit, and rating scale functioning, as well as construct and content validity. Multiple linear regression was used to predict the effect of demographic covariates on the extent of pre-post change.

Results/Outcomes: Of 396 participating students, 60% were non-Hispanic White and 57% were male. The scale demonstrated evidence of unidimensionality of a construct designated “social justice self-efficacy”. The rating scale functioned best with three points. Four items were removed to optimize person-item distribution, though few items were difficult to endorse. Only attending the private school was significantly associated with increased pre-post change.

Discussion: The Social Justice and Empathy Assessment (SJEA) survey is functional as a criterion-referenced assessment to determine whether minimum competency in social justice self-efficacy is experienced before or after participation in a CAPE-informed educational program. The SJEA may be applicable to other health profession students though more evidence of validity and reliability should be established.

Directly providing Healthcare to Community members without Health Insurance

Casey McKaughan

Introduction: Clinica Amistad is a small clinic located south of Tucson focusing on community outreach and reliant on volunteer work. Providers in various fields volunteer their time to come down and provide free healthcare to our patients. We set up appointments for our patients based on their needs, but we also accept patients without appointments. Because we offer services free of charge, we are only open two nights a week and the first Saturday of every month.

Methods/Activities: This work is important because our patients cannot get healthcare services anywhere else. Local students, many of which are coming from the University of Arizona, volunteer in multiple office positions including front desk, filing patient folders and even helping the providers directly in the exam rooms. They gain experience in the medical field while also working closely with a vulnerable population.

Results/Outcomes: Clinica Amistad is celebrating its 15th year of helping people in the community. In the future, we would like to utilize the student body at the University of Arizona for continued volunteer work and establish long-term positions for internships. We rely on them to help the clinic run smoothly. We want to continue outreach by creating relationships with organizations in the area to provide information about other services available to our patients in the area.

Discussion: The significance of working at a non-profit clinic is seeing first hand the need for free medical services for the vulnerable population in our community. It shows how community members who need the most attention and help are not getting the resources they need – which is also a theme in Public Health.

Efficacy of antimicrobial ear drops for microbial reductions

Mandie White, Amy Zimmer-Faust, Jennie Pearce-Walker, Marc Verhougstraete

Introduction: Surfers are 1.5 times more likely to acquire infections than non-surfers due to exposure to potentially contaminated water. One of these infections types can be ear infections. In order to prevent ear infections in surfers this project will test an antimicrobial ear drop intervention by completing the following objectives: 1) Determine efficacy of antimicrobial drops against *Escherichia coli*, *Staphylococcus aureus*, and Coliphage MS2 virus; and 2) Determine an effective antimicrobial drop dosage amount.

Methods/Activities: The methods include serial dilutions of *S. aureus*, *E. coli*, and MS2 that will be exposed to three doses of BigWave Drops (250ul, 500ul, and 125ul). These microorganisms will be grown on selective media to promote the growth of the desired organisms while inhibiting the growth of undesirable organisms. The bacteria's will be counted by visible colonies and the virus will be counted as clearing and host lawn.

Results/Outcomes: The anticipated results are that the antimicrobial drops will be effective at reducing bacteria and viruses. We anticipate that the recommended dose (500ul) will be most effective at reducing environmentally expected concentrations of bacteria and viruses compared to twice and half the recommended doses.

Discussion: These drops will reduce microbial concentrations in the laboratory and therefore have the potential to reduce ear infections in surfers, a major adverse health outcome associated with recreational activities in marine settings. Children and elderly surfers are at particular risk of infection due to weakened immune systems and will therefore, benefit most from the tested intervention.

Exploring PA-PB1 inhibitors as Next-Generation Anti-Viral Agents

Yanmei Hu, Jiantao Zhang, Rami Musharrafieh, Chunlong Ma, Jun Wang

Background: Influenza viruses are respiratory pathogens that are responsible for seasonal influenza and sporadic influenza pandemic associated with significant morbidity and mortality, and a huge cost. The therapeutic efficacy of current influenza vaccines and small molecule antiviral drugs is limited due to the emergence of resistance in influenza viruses, therefore innovative inhibitors with a different mode of action are urgently needed. The influenza polymerase complex consists of PA, PB1 and PB2 subunits, and the subunits interactions (PA-PB1 and PB1-PB2) are essential for polymerase activity. Currently there are a few polymerase inhibitors at different stages of clinical trials, so it is widely recognized as a validated drug target, given its critical role in virus replication and high degree of conservation among influenza A and B viruses.

Methods/Activities: Molecule docking was applied for initial screening, SAR studies was used to optimize the initial hit compounds and the mechanism of lead compounds were confirmed by ELISA in vitro and time of addition and real-time qPCR in cell cultures.

Results/Outcomes: One hit compound 5 was confirmed to inhibit PAC-PB1N interactions in an ELISA assay and had potent antiviral activity in an antiviral plaque assay. Subsequent structure-activity relationship studies led to the discovery of 12a, which had broad-spectrum antiviral activity and a higher in vitro genetic barrier to drug resistance than oseltamivir.

Discussion: The discovery of compound 12a as a influenza antiviral with a high in vitro genetic barrier to drug resistance is significant, as it offers a second line of defense to combat the next influenza epidemics and pandemics if vaccines and oseltamivir fail to confine the disease outbreak.

Implementing the Active School Neighborhood Checklist in the SNAP-Ed Schools

***Gabriela Barillas-Longoria**, Lauren McCullough, Vanessa Farrell, Scottie Misner

Introduction: As a part of a multi-level obesity-prevention approach, the SNAP-Ed encourages walking and biking (w/b) so that youth can achieve the recommended sixty minutes of daily physical activity. To assess the walkability, bikeability, and safety of the SNAP-Ed schools, the University of Arizona Nutrition Network (UANN) implemented the Active School Neighborhood Checklist (ASNC) in 10 elementary schools in Pima County.

Methods/Activities: The ASNC contains 57 questions divided into eight sections related to supportive policies, built environment, and infrastructure. Total scores of 0-41 were considered poor, scores 42-83 were moderate, and scores 84-113 were good. The UANN visually surveyed a one-mile radius of each school for built-environment factors. Other questions were answered by, consulting with school officials, city and county planners, public health representatives, and Safe Routes to School (SRTS) coordinators.

Results/Outcomes: Schools' total scores ranged from poor to moderate (17-47). Nine of the schools surveyed scored poorly (<31); one school scored moderately (47). All schools surveyed had many physical barriers (high-speed traffic, multiple lanes, etc.). All schools scored highly (14-16 out of a possible 20 points) in the supportive policies section. The ASNC assessment identified to the UANN that two schools had sufficient infrastructure, built environment assets and supportive programs to encourage w/b to school via the creation and dissemination of w/b plans. The SRTS program was contracted by the UANN to create the w/b plans.

Discussion: The results identified appropriate schools for w/b plans, assets, and challenges.

Lutheran Social Services of the Southwest

Kathryn Cremer

Introduction: Lutheran Social Services of the Southwest (LSS-SW) is a nonprofit organization who has assisted with resettling refugees and asylees by offering quality services and resources for over 30 years. An essential service offered, the Medical Intensive Case Management (ICM), provides specialized help to those with physical and mental health needs. This program engages with all types of physical and mental health medical centers, multiple government officials for immigration and employment services, community members, and more.

Methods/Activities: Mandatory health screenings show those that require specialized health management and are then enrolled in the ICM program. Each client is assessed, and an individualized plan is created specific to their healthcare needs. Refugees are often confused by the complex U.S. healthcare system and struggle with the language barrier. The ICM program advocates for the refugee population in order for them to receive appropriate healthcare.

Results/Outcomes: For refugees, there are many barriers they must overcome. The ICM program attempts to ease the transition of resettling in the United States. The program is always available to clients of LSS-SW. There are guidelines for a one-year enrollment period. However, clients can be re-enrolled if needed.

Discussion: Working with refugees' health is a complex process with many aspects involved. An ICM case manager advocates for refugees who cannot speak up for themselves. The ICM program attempts to close the gap between refugees and challenges with receiving proper healthcare.

Nonprofit Data Management & Reporting at Clínica Amistad

Christina Baum

Introduction: This poster will provide an overview of the Clínica Amistad Peace Corps Fellowship in Data Management. Clínica Amistad is a free medical clinic that provides care to the uninsured population of Tucson. The clinic was established in 2003 and is fully funded by donations and grants. In addition, almost all of the providers, interpreters, receptionists, and medical assistants are volunteers. This poster will highlight the current Peace Corps Fellowship Data Management position which involves the collection, analysis, and reporting of clinic data.

Methods/Activities: This Fellowship serves to strengthen public health skills by exposing the Fellow to nonprofit management, data collection, and analysis. Clínica Amistad is a community-led organization that engages in outreach by providing education and medical care to vulnerable members of the Tucson community.

Results/Outcomes: This activity is still in progress. Data collection and entry has been completed, and the analysis and creation of the report are underway.

Discussion: This project allows interns to become versed in large dataset management, how to design data collection tools to maximize efficiency and response rate, and how to write an effective Annual Report. The results from the report will be used to better understand patient demographics and to inform fundraising efforts for Clínica Amistad.

Prebiotic Supplement Use and Colorectal Cancer Risk in Post-Menopausal Women

***Meghan Skiba**, Lindsay Kohler, Tracy Crane, Elizabeth Jacobs, Ikuko Kato, Aladdin Shadyab, Linda Snetselaar, Lihong Qi, Cynthia Thomson

Introduction: Fiber-based prebiotic supplements are marketed for promoting the growth of beneficial microorganisms and to maintain bowel health. Prebiotic available over-the-counter may be composed of either soluble or insoluble fiber. While the association between dietary fiber intake and colorectal cancer (CRC) has been studied, the association between prebiotic use and CRC remains unclear.

Methods/Activities: The association between prebiotic use and CRC risk was studied using data from the Women's Health Initiative. Self-reported prebiotic use was documented at study enrollment. Adjudicated CRC cases were captured using medical and death records. Cox proportional hazards models were used to estimate the hazard ratio (HR), related to prebiotic use and CRC risk.

Results/Outcomes: A total of 3,032 CRC cases were diagnosed during an average 15.4 years of follow-up. Prebiotic supplement users (n= 5,944, 3.7%) were predominately non-Hispanic whites, non-smokers, with a normal BMI. Overall, use of prebiotics was not associated with CRC risk (HR: 1.12; 95%CI: 0.91-1.38). The type of prebiotic supplement (insoluble vs. soluble) was not associated with CRC risk. Likelihood ratio tests indicated no significant interactions between prebiotic use and CRC risk with other CRC risk factors including metabolic syndrome.

Discussion: These results suggest that prebiotic fiber supplement use is not have a statistically significant association with CRC risk in post-menopausal women. These findings do not support the promotion of prebiotic fiber supplements to reduce CRC risk in post-menopausal women.

Phenology with a New Approach

Brenda Mbaabu

Background: The purpose of this project is to *engage the USA-NPN phenology tools with public health practitioners and researchers to conduct disease surveillance in the south west of the U.S.*

Methods/Activities:

1. Conduct a comprehensive research on vector borne diseases and surveillance projects/apps in the Southwest of the U.S.
2. Compile a report and create a needs assessment survey to assess the role of USA-NPN in disease vector data.
3. Interview public health practitioners, researchers and underserved populations to inform program development.
4. Collaborate with stakeholders to develop tools/programs.

Results/Outcomes:

1. Comprehensive research on vector borne diseases and existing projects/applications being used in the Southwest of the United States that are focused on vector surveillance.
2. A compiled report on prevalent vector borne diseases of concern in the Southwest of the United States and the current projects/ technological applications that are being used to study them.
3. A survey informed by aforementioned research and report that will allow public health practitioners and community to identify what role the National Phenology Network can add to existing disease vector surveillance efforts.

Discussion: Research was conducted from various databases and two spreadsheets were created focused on vector borne diseases. Thereafter, a report was written highlighting the primary stakeholders (researchers and public health practitioners). We created a needs assessment survey and are currently in the process of interviewing researchers and public health practitioners to assess the gaps that USA-NPN can fill in disease vector surveillance.

The Coverdell Fellows Program's Social Accounting & Economic Impact: 2000 - 2018

Lauren Jaeger

Background: Participation in civic engagement and community service builds social capital, strengthens communities, and boosts economies by adding human capital resources for social capacity. Through the Peace Corps Coverdell Fellows program at the University of Arizona, students across 25 academic programs have partnered with over 150 agencies to work with underserved populations from 2000 to present. By updating the Social Return on Investment, staff aims to calculate the economic impact of added human capital provided by the Coverdell Fellows program to Southern Arizona.

Methods/Activities: In 2015 the Graduate College created a Social Return on Investment highlighting the impact of the Peace Corps Coverdell Fellows program. Staff updated the report through 2018, and key informant interviews were conducted to better capture the programs social impact. To measure economic impact, the Independent Sector value of volunteer time was used to capture the contributions to the community from 2000 to 2018.

Results/Outcomes: Coverdell Fellows have completed over 407,390 hours of service from 2000 to 2018 and has generated \$8,800,280 to the local economy through Outreach Assistantships. This work will be used to create an updated Social Return on Investment for the University of Arizona Peace Corps Coverdell Fellows program through the 2018-2019 academic year. The final report will be ready in June of 2019.

Discussion: Measuring the economic impact of the Coverdell Fellows program can be used to make a persuasive and logical argument for its continuation and financial support from local agencies, U.S. Peace Corps, and the University of Arizona's Graduate College.

The Use of Plastic Straws on University of Arizona Campus

Cody Welty, Priscilla Magrath, Amarsanaa Byambadorj, Babasola Okusanya, Jennifer McElfresh, Adeline June, and Halimatou Alaofe

Introduction: Despite increasing awareness of environmental impact of plastic straws there is little published research on underlying human behaviors involved in plastic straw use. This research aims to understand plastic straw use at the University of Arizona campus to contribute to improved design of interventions aimed at reducing plastic straw use, given its contribution to environmental pollution. Through qualitative research we examine the role of intentional decision- making, habit, and social and environmental cues in determining plastic straw use.

Methods/Activities: Researchers used several forms of qualitative methods to develop understanding of on-campus plastic straw use and possible reduction solutions. Key informant interviews were conducted with retail servers, retail managers, and environmental activists. A series of observations were conducted in four sites on campus. Additionally, six semi-structured interviews were conducted with consumers of plastic straws on campus to assess straw use frequency and attitudes of plastic straw use. Two focus groups were conducted with on-campus environmental activists and retail managers to assess possible barriers and impacts of implementing a future change to straw use policy.

Results/Outcomes: Preliminary results of the observations indicated interventions should be focused at the system level instead of the customer level. Results of the study are ongoing but will be prepared by the date of the poster forum.

Discussion: The results of this study have the potential to impact University of Arizona policy, and will provide a strong initial assessment and guide for future environmental health research on campus.

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