



THE UNIVERSITY OF ARIZONA

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

# **Spring 2018 MPH Internship Conference**

**Friday, April 13, 2018**

**1:20pm – 5:00pm**

**Drachman Hall  
Phoenix Biomedical Campus**



# Contents

	<u>Page</u>
<b>Acknowledgements</b>	4
<b>Schedule of Events</b>	5
<b>Presenters</b>	6
<b>Presenters' Email Addresses</b>	9
<b>Presenter Schedule</b>	11
<b>Presentations</b>	
Session I	12
Session II	14
Session III	16
Session IV	18
Session V	20
Session VI	22
<b>Abstracts</b>	
Session I	25
Session II	37
Session III	49
Session IV	61
Session V	73
Session VI	85
<b>Drachman Hall Map</b>	97
<b>The MPH Internship Experience</b>	98

# **Acknowledgements**

All of our wonderful internship sites throughout the state, nation, and world with whom we work to improve the state of public health

The students and faculty of MEZCOPH, who are central to the success of the MPH Program

The Office of Student Services and Alumni Affairs for their outstanding efforts, support, and encouragement

## **Internship Conference Volunteers**

We would like to thank all of the volunteers for their time and effort in making this a wonderful event

## **Conference Planning Committee**

Camille Gonzalez | Derek Liu | Andrea Martinez |  
Katey Redmond | Juhyung Sun

## **Office of Student Services and Alumni Affairs**

Kim Barnes  
Tanya Nemec  
Ryley Tegler  
Chris Tisch, Assistant Dean

# Schedule of Events

**1:20p-5:00p**      Student Internship Presentations  
**(Tucson-Drachman Hall A; Phoenix-Biomedical Campus Building 2)**

- Session I:**              Drachman Hall, Room A112
- Session II:**              Drachman Hall, Room A116  
Phoenix Building 2, Room 2306
- Session III:**             Drachman Hall, Room A118
- Session IV:**             Drachman Hall, Room A120
- Session V:**              Drachman Hall, Room A122
- Session VI:**             Phoenix Building 2, Room 2309

**5:00p-6:00p:**          Reception  
**(Walkway of Wellness, Tucson)**

## Presenters

<b>Name</b>	<b>Concentration*</b>	<b>Room**</b>	<b>Time</b>	<b>Page</b>
Christina Boudreau	PHP	Phx 2309	3:20 PM	92
David Campas	HBHP	A118	1:40 PM	51
Ranjana Chabra	HSA	A116 / Phx 2306	4:20 PM	47
Cory Christensen	EPI	A122	2:20 PM	77
Hershel Clark	FCH MCH	A120	3:40 PM	69
R. David Contreras	EOH	A122	1:20 PM	74
Elise Corriveau	PHP	A116 / Phx 2306	4:00 PM	46
Lindsey DeBoer	HBHP	A120	4:40 PM	72
Claudia Diaz-Combs	EOH/LAS	A122	3:00 PM	79
Lisa Driscoll	MD/MPH	A116 / Phx 2306	3:40 PM	45
Beau Finan	HBHP	A112	3:20 PM	32
Anita Fitzgerald	PHP	A116 / Phx 2306	1:20 PM	38
Gabriela Flores	PHPM	A116 / Phx 2306	3:00 PM	43
Erica Freese	FCH Global	A112	2:20 PM	29
Kristine Friesen	FCH Global	A112	1:40 PM	27
Mollie Gaitz	HBHP	A118	4:20 PM	59
Fernanda Garavito	EOH	A122	1:40 PM	75
Justin Ho	BIOS	A122	3:40 PM	81
Zaina Innabi	HSA	A116 / Phx 2306	4:40 PM	48
Alexandra Kaufman	HBHP	A118	4:40 PM	60
Dylan Kent	BIOS	A122	2:40 PM	78
Daniel Kitts	EPI	A122	3:20 PM	80
Dejane Lambert	PHP	Phx 2309	3:00 PM	91
Priscilla Lauro	One Health	A120	3:00 PM	67
James Lendrum	MD/MPH	Phx 2309	4:00 PM	94
Anthony Loffredo	PHPM	A116 / Phx 2306	3:20 PM	44

## Presenters (Cont.)

<b>Name</b>	<b>Concentration*</b>	<b>Room**</b>	<b>Time</b>	<b>Page</b>
Stephanie Mallahan	FCH MCH	A112	1:20 PM	26
E. Lauren McCrystal	FCH MCH	A118	3:40 PM	57
Audra McEowen	PHP	Phx 2309	2:00 PM	88
Ravyn Miles	FCH MCH	A120	2:00 PM	64
Sachin Mishra	EPI	A122	4:40 PM	84
Ralph Mohty	MD/MPH	Phx 2309	3:40 PM	93
Vanessa Moore	HBHP	A118	2:40 PM	54
Hayley Moretz	FCH Global/LAS	A120	2:20 PM	65
Alina Mouritsen	FCH MCH	A120	1:40 PM	63
Chantal Nez	HBHP	A118	4:00 PM	58
Nafisah Paige	HBHP	A112	3:00 PM	31
Kimberly Parra	FCH MCH	A120	1:20 PM	62
Nishitkumar Patel	HSA	A116 / Phx 2306	2:20 PM	41
Taylor Pitt	MD/MPH	Phx 2309	4:20 PM	95
Hana Putnam	PHP	Phx 2309	1:40 PM	87
Hamza Rafique	FCH Global	A112	2:40 PM	30
Desiree Ranshaw	PHP	Phx 2309	1:20 PM	86
Alex Redburn	PHPM/MBA	A116 / Phx 2306	2:40 PM	42
Alexa Redmond	FCH Global	A118	2:00 PM	52
Arianna Resendiz Bedoya	HBHP	A118	2:20 PM	53
Karyn Roberts	HBHP	A118	3:20 PM	56
Nicholas Rolig	FCH Global	A112	4:20 PM	35
Emily Ronan	EPI	A120	4:00 PM	70
Shayna Rosenblum	FCH Global	A120	2:40 PM	66
Charis Royal	PHP	A116 / Phx 2306	1:40 PM	39
Jacquanette Slowtalker	FCH MCH	A118	3:00 PM	55

## Presenters (Cont.)

<b>Name</b>	<b>Concentration*</b>	<b>Room**</b>	<b>Time</b>	<b>Page</b>
Teresa Sosa	HBHP	A120	3:20 PM	68
Kristi Sprowl	FCH Global	A112	3:40 PM	33
Ellen Stark	PHPM/JD	A116 / Phx 2306	2:00 PM	40
Katherine Suarez	PHP	Phx 2309	2:20 PM	89
Sheena Tarrant	PHP	Phx 2309	2:40 PM	90
Kimberly Tham	EOH	A122	2:00 PM	76
Lindsey Thatcher	PHPM	A118	1:20 PM	50
Alyssa Thomas	MD/MPH	Phx 2309	4:40 PM	96
Eric Tompkins	BIOS	A122	4:00 PM	82
Kathryn Tucker	HBHP	A112	2:00 PM	28
Laura Vitkus	HBHP	A112	4:00 PM	34
R. David Woosley	EPI	A120	4:20 PM	71
Umar Zahid	BIOS	A122	4:20 PM	83

\*Concentrations and Dual Degree Designations

BIOS – Biostatistics

EOH – Environmental and Occupational Health

EOH IH - Environmental and Occupational Health Industrial Hygiene Track

EPI – Epidemiology

FCH MCH - Family and Child Health Maternal and Child Health Track

FCH GLOBAL - Family and Child Health Global Track

HSA – Health Services Administration

HBHP - Health Behavior Health Promotion

MD/MPH- Medical Doctor/Master of Public Health

PHP - Public Health Practice

PHPM – Public Health Policy & Management

\*\*Rooms:

All “A” rooms listed are found on the first floor of Drachman Hall.

Phoenix presentations are located in Biomedical Campus Building 2, Rooms 2306 and 2309.



## Presenters' Email Addresses

<b>Name</b>	<b>Email</b>
Christina Boudreau	<i>cboudreau@email.arizona.edu</i>
David Campas	<i>dcampas@email.arizona.edu</i>
Ranjana Chabra	<i>rchabra@email.arizona.edu</i>
Cory Christensen	<i>corychristensen@email.arizona.edu</i>
Hershel Clark	<i>hershelclark@email.arizona.edu</i>
R. David Contreras	<i>rdcontreras@email.arizona.edu</i>
Elise Corriveau	<i>encorriv@email.arizona.edu</i>
Lindsey DeBoer	<i>ldeboer@email.arizona.edu</i>
Claudia Diaz-Combs	<i>claudia5@email.arizona.edu</i>
Lisa Driscoll	<i>lisajdriscoll@email.arizona.edu</i>
Beau Finan	<i>caitlinefinan@email.arizona.edu</i>
Anita Fitzgerald	<i>anitalubin@email.arizona.edu</i>
Gabriela Flores	<i>gflores1@email.arizona.edu</i>
Erica Freese	<i>ebfreese@email.arizona.edu</i>
Kristine Friesen	<i>kfriesen@email.arizona.edu</i>
Mollie Gaitz	<i>mgaitz93@email.arizona.edu</i>
Fernanda Garavito	<i>fgaravit@email.arizona.edu</i>
Justin Ho	<i>hoja@email.arizona.edu</i>
Zaina Innabi	<i>zainainnabi@email.arizona.edu</i>
Alexandra Kaufman	<i>alliekaufman@email.arizona.edu</i>
Dylan Kent	<i>dkent@email.arizona.edu</i>
Daniel Kitts	<i>danielkitts@email.arizona.edu</i>
Dejane Lambert	<i>dejlambert@email.arizona.edu</i>
Priscilla Lauro	<i>plauro@email.arizona.edu</i>
James Lendrum	<i>jameslendrum@email.arizona.edu</i>
Anthony Loffredo	<i>loffredo@email.arizona.edu</i>
Stephanie Mallahan	<i>smallahan@email.arizona.edu</i>
E. Lauren McCrystal	<i>mccrystl@email.arizona.edu</i>
Audra McEowen	<i>audramceowen@email.arizona.edu</i>
Ravyn Miles	<i>milesr@email.arizona.edu</i>
Sachin Mishra	<i>skmishra@email.arizona.edu</i>
Ralph Mohty	<i>rmohty@email.arizona.edu</i>

Vanessa Moore	<i>vkmoore27@email.arizona.edu</i>
Hayley Moretz	<i>hayleymoretz@email.arizona.edu</i>
Alina Mouritsen	<i>alm1@email.arizona.edu</i>
Chantal Nez	<i>cmnez@email.arizona.edu</i>
Nafisah Paige	<i>nafisahp@email.arizona.edu</i>
Kimberly Parra	<i>klparra@email.arizona.edu</i>
Nishitkumar Patel	<i>nrrpatel1@email.arizona.edu</i>
Taylor Pitt	<i>taylorpitt@email.arizona.edu</i>
Hana Putnam	<i>hanaputnam@email.arizona.edu</i>
Hamza Rafique	<i>hamzaraf@email.arizona.edu</i>
Desiree Ranshaw	<i>desireeranshaw@email.arizona.edu</i>
Alex Redburn	<i>aredburn@email.arizona.edu</i>
Alexa Redman	<i>redmonda@email.arizona.edu</i>
Arianna Resendiz Bedoya	<i>aresendiz@email.arizona.edu</i>
Karyn Roberts	<i>karynr@email.arizona.edu</i>
Nicholas Rolig	<i>narolig@email.arizona.edu</i>
Emily Ronan	<i>eronan@email.arizona.edu</i>
Shayna Rosenblum	<i>shaynarosenblum@email.arizona.edu</i>
Charis Royal	<i>croyal@email.arizona.edu</i>
Jacquanette Slowtalker	<i>jslowtalker@email.arizona.edu</i>
Teresa Sosa	<i>teresasosa@email.arizona.edu</i>
Kristi Sprowl	<i>ksprowl@email.arizona.edu</i>
Ellen Stark	<i>eestark@email.arizona.edu</i>
Katherine Suarez	<i>ksuarez@email.arizona.edu</i>
Sheena Tarrant	<i>starrant@email.arizona.edu</i>
Kimberly Tham	<i>ktham@email.arizona.edu</i>
Lindsey Thatcher	<i>lrt@email.arizona.edu</i>
Alyssa Thomas	<i>thomasa@email.arizona.edu</i>
Eric Tompkins	<i>ejt92@email.arizona.edu</i>
Kathryn Tucker	<i>kmtucker@email.arizona.edu</i>
Laura Vitkus	<i>lvitkus@aging.arizona.edu</i>
R. David Woosley	<i>wooslerd@email.arizona.edu</i>
Umar Zahid	<i>umarzahid@email.arizona.edu</i>

## Presenters Schedule

<b>Time</b>	<b>Session I Room A112</b>	<b>Session II Room A116/ Phx 2306</b>	<b>Session III Room A118</b>	<b>Session IV Room A120</b>	<b>Session V Room A122</b>
<b>1:20</b>	S. Mallahan	A. Fitzgerald	L. Thatcher	K. Parra	R. D. Contreras
<b>1:40</b>	K. Friesen	C. Royal	D. Campas	A. Mouritsen	F. Garavito
<b>2:00</b>	K. Tucker	E. Stark	A. Redmond	R. Miles	K. Tham
<b>2:20</b>	E. Freese	N. Patel	A. Resendiz Bedoya	H. Moretz	C. Christensen
<b>2:40</b>	H. Rafique	A. Redburn	V. Moore	S. Rosenblum	D. Kent
<b>3:00</b>	N. Paige	G. Flores	J. Slowtalker	P. Lauro	C. Diaz-Combs
<b>3:20</b>	B. Finan	A. Loffredo	K. Roberts	T. Sosa	D. Kitts
<b>3:40</b>	K. Sprowl	L. Driscoll	E. L. McCrystal	H. Clark	J. Ho
<b>4:00</b>	L. Vitkus	E. Corriveau	C. Nez	E. Ronan	E. Tompkins
<b>4:20</b>	N. Rolig	R. Chabra	M. Gaitz	R. D. Woosley	U. Zahid
<b>4:40</b>		Z. Innabi	A. Kaufman	L. DeBoer	S. Mishra

### Phoenix Only

<b>Time</b>	<b>Session VI Phx Room 2309</b>
<b>1:20</b>	D. Ranshaw
<b>1:40</b>	H. Putnam
<b>2:00</b>	A. McEowen
<b>2:20</b>	K. Suarez
<b>2:40</b>	S. Tarrant
<b>3:00</b>	D. Lambert
<b>3:20</b>	C. Boudreau
<b>3:40</b>	R. Mohty
<b>4:00</b>	J. Lendrum
<b>4:20</b>	T. Pitt
<b>4:40</b>	A. Thomas

## Session I

*(Drachman Hall, Room A112)*

- 1:20 TREATMENT OF OPIOID USE DURING PREGNANCY AND NEONATAL OUTCOMES. **S. Mallahan**. Tucson. MPH Internship Committee Chair: B. Duncan, MD. Site and Preceptor: Tucson Medical Center - Lori Groenewold, LCSW.
- 1:40 ADOLESCENT HEALTH IN LESOTHO: AN INTERNSHIP WITH UNICEF. **K. Friesen**. Tucson. MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor: UNICEF Lesotho - Makhetha Moshabesha.
- 2:00 VOLUNTARY CERTIFICATION OF COMMUNITY HEALTH WORKERS IN ARIZONA: A SYSTEMS CHANGE APPROACH TO WORKFORCE DEVELOPMENT. **K. Tucker**. Tucson. MPH Internship Committee Chair: M. Ingram, MPH. Site and Preceptor: Arizona Community Health Worker Association - Floribella Redondo.
- 2:20 REPRODUCTIVE HEALTH PROMOTION AND STORY COLLECTION IN ARIZONA. **E. Freese**. Tucson. MPH Internship Committee Chair: M. Koss, PhD. Site and Preceptor: Arizona Family Health Partnership - Brenda (Bré) Thomas MPA.
- 2:40 PERCEPTIONS OF SEXUAL AGGRESSION IN A BAR SETTING AMONG UNDERGRADUATE MALES. **H. Rafique**. Tucson. MPH Internship Committee Chair: M. Koss, PhD. Site and Preceptor: Relationship Violence Program - Elise Lopez, DrPH, MPH.

- 3:00 POISON AWARENESS AND SAFE STORAGE TRAINING IN PIMA COUNTY FOSTER PARENTS. **N. Paige.** Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Arizona Poison and Drug Information Center - Laura Morehouse MPH, CHES.
- 3:20 AN ANALYSIS OF MATERNAL AND CHILD HOMELESSNESS AND HOUSING SERVICES IN PIMA COUNTY. **B. Finan.** Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Pima County Community Development and Neighborhood Conservation - Margaret Kish, MSW, MPA.
- 3:40 ES DIFICIL SER MUJER: THE EFFECTS OF MATERNAL DEPRESSION IN NOGALES, AZ. **K. Sprowl.** Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Mariposa Community Health Center - Gail Emrick, MPH.
- 4:00 BUILDING COMMUNITY THROUGH HEARING LOSS EDUCATION. **L. Vitkus.** Tucson. MPH Internship Committee Chair: S. Carvajal, PhD, MPH. Site and Preceptor: Arizona Center on Aging - Rachel Peterson, MPH.
- 4:20 ANALYSIS AND MAPPING OF TELEMEDICINE/TELEHEALTH SERVICES WITHIN THE UNITED STATES. **N. Rolig.** Tucson. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: Arizona Telemedicine Program - Ronald S. Weinstein, MD, FCAP, FATA.

## Session II

*(Drachman Hall, Room A116 / Phoenix Building 2, Room 2306)*

- 1:20 ASSESSMENT OF ACCESS AND FUNCTIONAL NEEDS GROUPS WITHIN MARICOPA COUNTY IN RELATION TO EMERGENCY PREPAREDNESS AND RESPONSE. **A. Fitzgerald.** Phoenix. MPH Internship Committee Chair: J. Foote, PhD. Site and Preceptor: Maricopa County Public Health Department - Mitchell Lach - Disease Control Division Administrator.
- 1:40 ARBOVIRUSES TESTING OF MOSQUITO POOLS IN ARIZONA THROUGH PCR QUANTIFICATION. **C. Royal.** Phoenix. MPH Internship Committee Chair: J. Foote, PhD. Site and Preceptor: Arizona State Public Health Laboratory - Kate Fitzpatrick, B.S.
- 2:00 TATTOO CONSUMER & TECHNICIAN ATTITUDES. **E. Stark.** Tucson. MPH Internship Committee Chair: L. Barraza, JD, MPH. Site and Preceptor: University of Arizona College of Pharmacy - Elizabeth Hall-Lipsy, JD, MPH.
- 2:20 DEVELOPMENT & EVALUATION OF PUBLIC HEALTH EMERGENCY PREPAREDNESS (PHEP) PLAN FOR TUCSON INTERNATIONAL AIRPORT AIR NATIONAL GUARD (TIA ANG). **N. Patel.** Tucson. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: 162nd Medical Group (162 MDG) - Maj. Richard G. Maldonado, M.Ed.
- 2:40 IMPROVING QUALITY SERVICE DELIVERY USING A MYSTERY SHOPPER PROGRAM. **A. Redburn.** Tucson. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Arizona Smokers' Helpline - Adrienne Lent, MBA, MPH.
- 3:00 REVIEWING STUDENT BARRIERS TO PUBLIC HEALTH INTERVENTION PROGRAM PARTICIPATION. **G. Flores.** Tucson. MPH Internship Committee Chair: J. Gerald MD, PhD. Site and Preceptor: Arizona Center for Rural Health - Alyssa Padilla, MPH.

- 3:20 OBAMA CARE IN THE TRUMP ERA: OPEN ENROLLMENT COMPARISONS. **A. Loffredo.** Tucson. MPH Internship Committee Chair: D. Derksen, MD. Site and Preceptor: Arizona Center for Rural Health - Bryna Koch.
- 3:40 EVALUATING A FQHC-BASED MEDICAL WEIGHT MANAGEMENT PROGRAM. **L. Driscoll.** Tucson. MPH Internship Committee Chair: H. Strich, MPH. Site and Preceptor: El Rio Community Health Center - Diane Haeger, MBA.
- 4:00 SCHOOL-WIDE NUTRITION INTERVENTION: COMMUNITY-BASED PARTICIPATORY RESEARCH. **E. Corriveau.** Phoenix. MPH Internship Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Capitol Elementary School - Lynette Wiltgen, MSN, RN, CSN.
- 4:20 ANTIBIOTIC STEWARDSHIP IN THE OUTPATIENT SETTING. **R. Chabra.** Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Health Services Advisory Group - Keith Chartier, MPH.
- 4:40 STRATEGIC PLANNING AND RECOMMENDATIONS FOR THE PRIMARY PREVENTION MOBILE UNIT. **Z. Innabi.** Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Juntos Por La Salud - Eduardo Gonzalez- Fagoaga MA, PhD.

## Session III

*(Drachman Hall, Room A118)*

- 1:20 WASHTENAW COUNTY HEALTH DEPARTMENT IDEA BUENOS VECINOS LATINO OUTREACH PROGRAM. **L. Thatcher.** Tucson. MPH Internship Committee Chair: M. Ingram, MPH. Site and Preceptor: Washtenaw County Health Department - Adreanne Waller, MPH.
- 1:40 PERSPECTIVES OF HISPANIC MALES PARTICIPATION IN A GENDER/CULTURALLY SENSITIVE WEIGHT LOSS INTERVENTION. **D. Campas.** Tucson. MPH Internship Committee Chair: D. Garcia, PhD. Site and Preceptor: The University of Arizona Collaboratory on Metabolic Disease Prevention & Treatment - Luis Valdez, PhD, MPH.
- 2:00 EVALUATION OF PHARMACOTHERAPY USE IN A COMMUNITY HEALTH CENTER WEIGHT MANAGEMENT PROGRAM. **A. Redmond.** Tucson. MPH Internship Committee Chair: D. Garcia, PhD. Site and Preceptor: El Rio Community Health Center - Diane Haeger, MBA.
- 2:20 QUALITATIVE ANALYSIS OF HISPANIC WOMEN'S PERSPECTIVES ON A CULTURALLY APPROPRIATE WEIGHT MANAGEMENT PROGRAM AT EL RIO HEALTH. **A. Resendiz Bedoya.** Tucson. MPH Internship Committee Chair: D. Garcia, PhD. Site and Preceptor: El Rio Community Health Center - Diane Haeger, MBA.
- 2:40 MENTORING PROGRAM RECOMMENDATIONS TO BUILD RESILIENCY AMONG PREGNANT AND PARENTING TEENS. **V. Moore.** Tucson. MPH Internship Committee Chair: P. Haynes, PhD. Site and Preceptor: Teen Outreach Pregnancy Services (TOPS) - Laura Pedersen, RN, MSN.



- 3:00 AMERICAN INDIAN YOUTH WELLNESS CAMP 2017: ADAPTING TO HEALTHY EATING BEHAVIORS. **J. Slowtalker**. Tucson. MPH Internship Committee Chair: N. Teufel-Shone, PhD. Site and Preceptor: Native American Research and Training Center (NARTC) - Francine Gachupin, PhD, MPH.
- 3:20 UNDERGRADUATE WOMEN'S PERCEPTIONS OF SEXUAL ASSAULT RESISTANCE PROGRAMS. **K. Roberts**. Tucson. MPH Internship Committee Chair: M. Koss, PhD. Site and Preceptor: Relationship Violence Programs, Health Promotion Sciences Department, College of Public Health - Elise Lopez, DrPH, MPH.
- 3:40 DESIGNING AND IMPLEMENTING A NUTRITION CHALLENGE IN A WORKPLACE WELLNESS PROGRAM. **E. L. McCrystal**. Tucson. MPH Internship Committee Chair: I. Ramos, MD. Site and Preceptor: Pima Community College Employee Wellness Program - Andrea Lightfoot Bisson, M. Adm.
- 4:00 EVALUATION OF HITEVI KARI EMPLOYEE WELLNESS PROGRAM. **C. Nez**. Tucson. MPH Internship Committee Chair: S. Sabo, DrPH, MPH. Site and Preceptor: Pascua Yaqui Diabetes Prevention and Treatment Program - Jennie Mullins, MPH.
- 4:20 MUJER SALUDABLE ACROSS BORDERS. **M. Gaitz**. Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: The Southwest Institute for Research on Women (SIROW) - Elizabeth Salerno-Valdez, MPH.
- 4:40 DEVELOPING A CARE COORDINATION MODEL UTILIZING COMMUNITY HEALTH WORKERS TO IMPROVE OUTCOMES FOR AJO'S ELDERLY POPULATION. **A. Kaufman**. Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Desert Senita Community Health Center - Lily Williams.

## Session IV

*(Drachman Hall, Room A120)*

- 1:20 FACTORS ASSOCIATED WITH ACANTHOSIS NIGRICANS AND BMI IN A CROSS-SECTIONAL SAMPLE OF ADOLESCENT FEMALES (12-17 YEARS) IN RURAL EASTERN GUATEMALA. **K. Parra.** Tucson. MPH Internship Committee Chair: V. Leybas Nuño, PhD, MSW. Site and Preceptor: Jutiapa, Guatemala - Pauline Jolly, PhD, MPH.
- 1:40 COMADRONAS, DOCTORS, AND MOTHERS: ROLES, PERCEPTIONS, AND BARRIERS TO COLLABORATION. **A. Mouritsen.** Tucson. MPH Internship Committee Chair: V. Leybas Nuño, PhD, MSW. Site and Preceptor: Antigua, Guatemala - Martha Rees, PhD.
- 2:00 THE EFFECT OF BABY-WEARING ON BREASTFEEDING IN YOUNG MOTHERS. **R. Miles.** Tucson. MPH Internship Committee Chair: V. Leybas Nuño, PhD, MSW. Site and Preceptor: Arizona State University, School of Social Work - Lela Rankin Williams, PhD.
- 2:20 EVALUATION OF INTERCULTURAL HEALTH PROGRAMMING IN SANTIAGO, CHILE. **H. Moretz.** Tucson. MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor: La Florida, Santiago, Chile - Ana Maria Oyarce, PhD, MPH, MSSc.
- 2:40 UNICEF LESOTHO NUTRITION TEAM INTERVENTIONS. **S. Rosenblum.** Tucson. MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor: UNICEF Lesotho - Nozizwe Chigonga, BS, MPH.
- 3:00 ONE HEALTH PERSPECTIVE ON ANIMAL AND ENVIRONMENTAL THERAPY FOR HUMAN HEALTH. **P. Lauro.** Tucson. MPH Internship Committee Chair: K. Pogreba-Brown, PhD, MPH. Site and Preceptor: Desert Milagros - Faith Sauso, PhD.

- 3:20 THE RESEARCH EXPERIENCE & LATINA BREAST CANCER SURVIVORS HEALTH DISPARITIES. **T. Sosa.** Tucson. MPH Internship Committee Chair: P. Haynes, PhD. Site and Preceptor: Arizona Cancer Center/Pace Laboratory - Thaddeus W. Pace, PhD.
- 3:40 EVALUATION OF CULTURALLY RELEVANT TOBACCO VIDEOS AMONG AMERICAN INDIAN YOUTH. **H. Clark.** Tucson. MPH Internship Committee Chair: S. Sabo, DrPH, MPH. Site and Preceptor: Winslow, Arizona (Black Hills Center for American Indian Health) - Patricia Nez Henderson M.D., MPH.
- 4:00 EVALUATION OF THE ENHANCED RECOVERY AFTER SURGERY PROGRAM AT CARONDELET ST. JOSEPH'S HOSPITAL. **E. Ronan.** Tucson. MPH Internship Committee Chair: K. Ernst, PhD, MPH. Site and Preceptor: Carondelet St. Joseph's Hospital - Chase Currie, MPH and Lisa Hymson, MPH.
- 4:20 ANALYSIS OF ANTIMICROBIAL PEPTIDE EXPRESSION IN TRANSGENIC (TG) AEDES AEGYPTI TO ASSESS THE EFFICACY OF TG MOSQUITO RELEASE AS A VECTOR CONTROL STRATEGY. **R. D. Woosley.** Tucson. MPH Internship Committee Chair: K. Ernst, PhD, MPH. Site and Preceptor: The Riehle Lab at the University of Arizona - Michael Riehle, PhD, MS.
- 4:40 HEALTHY 2B ME (H2BM): MODIFICATION OF A PUBLIC-HEALTH THEMED SUMMER CAMP FOR TUCSON REFUGEE YOUTH HEALTHY 2B ME (H2BM): MODIFICATION OF A PUBLIC-HEALTH THEMED SUMMER CAMP FOR TUCSON REFUGEE YOUTH. **L. DeBoer.** Tucson. MPH Internship Committee Chair: C. Thomson, PhD, RD. Site and Preceptor: Canyon Ranch Center for Prevention and Health Promotion - Nicole Bergier, B.A.

## Session V

*(Drachman Hall, Room A122)*

- 1:20 HITS CONSORTIUM EXPERIENCE: CATALYZING CHANGE THROUGH WORD CLOUDS. **R. D. Contreras.** Tucson. MPH Internship Committee Chair: K. Reynolds, MSPH, PhD. Site and Preceptor: HITS Consortium - Christine Greene, MPH, PhD.
- 1:40 EFFECTIVENESS OF AN INSTRUCTIONAL MODULE ON IMPROVING HAND HYGIENE PRACTICES IN AN OFFICE SETTING. **F. Garavito.** Tucson. MPH Internship Committee Chair: M. Verhougstraete, PhD. Site and Preceptor: ESRAC - Kelly Reynolds, MSPH, PhD.
- 2:00 COMMUNITY TEACH-IN TO ADDRESS HEALTH CONCERNS RELATED TO TUCSON INTERNATIONAL AIRPORT AREA SUPERFUND SITE EXPOSURES IN SOUTHSIDE TUCSON. **K. Tham.** Tucson. MPH Internship Committee Chair: P. Beamer, PhD. Site and Preceptor: Pima County Health Department - Kristin Barney, MA.
- 2:20 DEVELOPMENT OF A VISUAL ACUITY QUESTIONNAIRE IN SUPPORT OF A CLINICAL TRIAL ON THE SHORT-TERM EFFECTS OF CARBIDOPA-LEVODOPA IN NEOVASCULAR AMD. **C. Christensen.** Tucson. MPH Internship Committee Chair: H. Brown, PhD, MPH. Site and Preceptor: Tucson Eye Care - Robert Snyder, MD, PhD, PC.
- 2:40 ENHANCED SURVEILLANCE OF HEAT-RELATED ILLNESS IN PINAL COUNTY: A QUALITY IMPROVEMENT PROJECT. **D. Kent.** Tucson. MPH Internship Committee Chair: E. Bedrick, PhD. Site and Preceptor: Pinal County Public Health Services District - Rachel Zenuk, MPH, BS.
- 3:00 COMMUNITY WATER QUALITY ANALYSIS IN THE ECUADORIAN AMAZON. **C. Diaz-Combs.** Tucson. MPH Internship Committee Chair: M. O'Rourke, PhD. Site and Preceptor: Lago Agrio, Ecuador - Donald Moncayo.

- 3:20 PATH TO WELLNESS: EVALUATION OF A CHRONIC KIDNEY DISEASE SCREENING PROGRAM. **D. Kitts**. Tucson. MPH Internship Committee Chair: L. Dennis PhD, MS. Site and Preceptor: National Kidney Foundation of Arizona - James Ivie, PhD.
- 3:40 STATISTICAL ANALYSIS FOR METABOLOMICS AND CLINICAL RESEARCH DATA. **J. Ho**. Tucson. MPH Internship Committee Chair: D. Roe, DrPH. Site and Preceptor: University of Arizona Cancer Center - H-H. Sherry Chow, Ph.D.
- 4:00 ANALYSIS OF THE RELATIONSHIP BETWEEN THREE COMMON ALLERGENS AND QUANTITATIVE AND QUALITATIVE MEASUREMENTS OF ASTHMA SYMPTOMS AND SEVERITY. **E. Tompkins**. Tucson. MPH Internship Committee Chair: D. Roe, DrPH. Site and Preceptor: Asthma and Airway Disease Research Center - Michael Daines, M.D.
- 4:20 THE HEALTH CARE BURDEN OF ADULT EMERGENCY DEPARTMENT VISITS AND SUBSEQUENT HOSPITALIZATION FOR URINARY TRACT INFECTION: AN ANALYSIS OF NATIONWIDE EMERGENCY DEPARTMENT SAMPLE DATA OF U.S. HOSPITALS, 2006-2011. **U. Zahid**. Tucson. MPH Internship Committee Chair: D. Roe, DrPH. Site and Preceptor: University of Arizona - Katherine Ellingson, PhD.
- 4:40 ADMINISTRATION AND ANALYSIS OF THE VR-12 PATIENT-REPORTED OUTCOME MEASURE IN A HOSPITAL SETTING. **S. Mishra**. Tucson. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: Banner-University Medical Center - Michael Dohm, MD.

## Session VI

*(Phoenix, Building 2, Room 2309)*

- 1:20      INVASIVE GROUP A STREPTOCOCCUS (IGAS) IN ARIZONA. **D. Ranshaw.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Arizona Department of Health Services (AZDHS) Office of Infectious Disease Services (OIDS) - Kenneth Komatsu, MPH and Rachana Bhattarai, BVSc&AH, MS, CIC.
- 1:40      SERVING THE COMMUNITY AND ENHANCING PROFESSIONAL DEVELOPMENT—THE IMPACT OF INTERNS ON A SUMMER FOOD SERVICE PROGRAM. **H. Putnam.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa County WIC - Jennifer Dykhuizen, MPH.
- 2:00      EVALUATING EXPOSURE REGISTRIES FOR COMMUNITY MEMBERS AND FIRST RESPONDERS FOR LARGE-SCALE CHEMICAL EXPOSURES. **A. McEowen.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa County Department of Public Health - William Smith, MS.
- 2:20      ARIZONA SCHOOLS: BEYOND EDUCATION - A SURVEY OF DISTRICTS OFFERING SERVICES AND PROGRAMMING OUTSIDE THE TRADITIONAL SCOPE OF EDUCATION, AND THE SUBSEQUENT IMPLICATIONS RELATED TO HEALTH. **K. Suarez.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Vitalyst Health Foundation - Suzanne Pfister, MPA.
- 2:40      INVESTIGATION AND MANAGEMENT OF SELECT ZOOONOTIC DISEASES IN MARICOPA COUNTY. **S. Tarrant.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa County Department of Public Health - Craig Levy, MS.

- 3:00 PROGRAM EVALUATION OF BLOOM365'S BLOOM IT UP CURRICULUM. **D. Lambert.** Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Bloom365 - Donna Bartos, BA, MPA.
- 3:20 COMMUNITY COLLABORATIVE WELLNESS PROGRAM. **C. Boudreau.** Phoenix. MPH Internship Committee Chair: E. Gonzalez, PhD. Site and Preceptor: ASU's Community Collaborative at the Westward Ho - Tama Reily.
- 3:40 CAREER CHARACTERISTICS AND PUBLIC HEALTH IMPRESSIONS BETWEEN MD AND MD-MPH GRADUATES AND CURRENT STUDENTS. **R. Mohty.** Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: University of Arizona College of Medicine - Phoenix - Moe Bell MD, MPH.
- 4:00 IMPROVING FRAGILITY FRACTURE FOLLOW-UP AND EDUCATION: A QUALITY IMPROVEMENT PROJECT. **J. Lendrum.** Phoenix. MPH Internship Committee Chair: M. Bell, MD. Site and Preceptor: Banner University Medical Center - Phoenix - Clifford Jones, MD.
- 4:20 RACIAL & ETHNIC DISPARITIES FOR CERVICAL CANCER IN ARIZONA: A REVIEW OF THEMES, RESOURCES AND POLICY RECOMMENDATIONS. **T. Pitt.** Phoenix. MPH Internship Committee Chair: M. Bell, MD. Site and Preceptor: University of Arizona College of Medicine Phoenix – Laura Mercer, MD.
- 4:40 A COMPARISON OF VIDEO EDUCATION VERSUS WRITTEN PAMPHLET IN ENCOURAGING OPIOID ABUSERS TO FILL PRESCRIPTIONS FOR TAKE HOME NALOXONE. **A. Thomas.** Phoenix. MPH Internship Committee Chair: M. Bell, MD. Site and Preceptor: Maricopa Integrated Health System - Kara Geren MD, MPH.





**Session I:  
1:20 – 4:40**

*Drachman Hall, Room A112*

**Abstracts**

TREATMENT OF OPIOID USE DURING PREGNANCY AND NEONATAL OUTCOMES. **S. Mallahan.** Tucson. MPH Internship Committee Chair: B. Duncan, MD. Site and Preceptor: Tucson Medical Center - Lori Groenewold, LCSW.

Background: Opioid abuse during pregnancy has emerged as a public health problem in the midst of the opioid epidemic that killed 116 people a day in 2016 (HHS, 2018). One estimate of the admissions of pregnant women to substance abuse treatment centers for abuse of prescription opioids shows an increase from 2% in 1992, to 28% by 2012 (Martin et al, 2015). Medication Assisted Treatment (MAT) with methadone, which is given to the patient instead of opioids and reduces withdrawal symptoms, is the current recommendation for the treatment of opioid abuse during pregnancy. Despite this recommendation, it is estimated that 55% to 94% of babies who are exposed in utero to either opioids or MAT will develop Neonatal Abstinence Syndrome (NAS) (McQueen & Murphy-Oikonen, 2016). In recent years, research has suggested that another type of MAT, buprenorphine may produce similar outcomes for mother and the neonate, when compared to methadone. Purpose: The internship project was conducted at Tucson Medical Center to determine which MAT leads to better fetal outcomes, including NAS, for those whose mothers were being treated with either methadone, buprenorphine, or who continued with their abuse of opioids during pregnancy. Methods: A retrospective review of the electronic medical records at Tucson Medical Center was conducted to answer the question. Results: The findings from the Tucson Medical Center medical records will be compared with a systematic review by Jones et al. (2012) that concluded that the use of buprenorphine during pregnancy results in a less severe case of NAS, when compared with the treatment of methadone; as well as a lower risk of preterm birth, increased birth weight, and increased head circumference reported in a meta- analysis by Zedler et al. (2016).

**ADOLESCENT HEALTH IN LESOTHO: AN INTERNSHIP WITH UNICEF. K. Friesen.**  
Tucson. MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor: UNICEF Lesotho - Makhetha Moshabesha.

**Introduction:** The purpose of this internship was to gain experience in the field of public health by learning how an organization operates on the ground translating what I have learned within the confines of the classroom into practice. The United Nations International Children’s Fund (UNICEF) in Lesotho provided the perfect opportunity to put the three public health functions of assessment, assurance, and policy into action. UNICEF Lesotho is dedicated to improving the lives of women, children and adolescents within the country. Adolescents in Lesotho face major health challenges including food insecurity, unemployment, and HIV/AIDS. I worked within the UNICEF adolescent health sector in developing, implementing, and evaluating projects. **Methods:** This internship developed capacity through: 1) gaining a deeper understanding of adolescent health issues and personal safety in Lesotho 2) helping facilitate adolescent health related trainings, 3) attending meetings with various stakeholders and 4) developing projects to support UNICEF Lesotho staff and their objectives in improving adolescent health outcomes. **Results:** Many barriers to project implementation exist within the UNICEF Lesotho office including external political pressure, internal office politics, and the gap between science and implementation. I developed several project proposals including a social media campaign, a sanitary pad project, and a monthly cross-sectoral log to streamline communication between departments. **Conclusion:** This internship improved my public health skills of assessment, assurance, and policy by providing me with the opportunity to see examples of different parts of the public health process. I learned how high-level public health operates while gaining insight into where I would like to take my career after graduation.

**VOLUNTARY CERTIFICATION OF COMMUNITY HEALTH WORKERS IN ARIZONA: A SYSTEMS CHANGE APPROACH TO WORKFORCE DEVELOPMENT. K. Tucker.**

Tucson. MPH Internship Committee Chair: M. Ingram, MPH. Site and Preceptor: Arizona Community Health Worker Association - Floribella Redondo.

Community Health Workers (CHWs) are frontline public health workers who have an unusually close connection to the community served. CHWs serve as clinical liaisons, educators and advocates who help to improve health care access and decrease health care costs. Around 1000 CHWs work in 19 counties and 15 tribal communities in the state of Arizona. Despite their proven record of success improving access to health care by marginalized communities, CHWs often do not receive recognition for their expertise or adequate compensation for their work. Most CHWs work from grant to grant; there are no sustainable financing mechanisms for CHWs in most states, including Arizona. In response to these issues, there is a national effort to improve the professional recognition and sustainability of CHWs, and one important trend in this movement is the creation of CHW voluntary certification mechanisms through state statute or training requirements. The Arizona Community Health Worker Association (AzCHOW) is working to establish a voluntary certification mechanism in Arizona in order to increase the professional recognition of the workforce and create avenues for CHW sustainability. This internship supported AzCHOW's efforts to design a voluntary certification process for community health workers as a mechanism to standardize and recognize the CHW profession. Through this internship, AzCHOW developed a process for approving CHW training programs based on 10 core competencies. These efforts will hopefully contribute to AzCHOW's current legislative efforts to house voluntary certification under the Arizona Department of Health Services.

REPRODUCTIVE HEALTH PROMOTION AND STORY COLLECTION IN ARIZONA. E. Freese. Tucson. MPH Internship Committee Chair: M. Koss, PhD. Site and Preceptor: Arizona Family Health Partnership - Brenda (Bré) Thomas, MPA.

Background: Arizona Family Health Partnership (AFHP) supports many reproductive health care centers across the state, including Planned Parenthood. A multifaceted approach is needed to sustain and foster support for such centers and their services. Story collection is one method to support this approach. Methods: A questionnaire was created to ask patients about their experiences and thoughts regarding reproductive health care. The questionnaire included four questions and was voluntary. All patients that came into the Planned Parenthood clinic of Tucson during story-collection sessions were asked if they wanted to participate. Results: Out of 50 individuals asked, 37 agreed to respond. The answers given to what services respondents had received illustrated the wide variety of services offered by Planned Parenthood, with the most common service being provision of birth control. Cost, accessibility and acceptance were all reasons patients gave for why they decided to come to the clinic. Patients felt that Planned Parenthood provided them with education that helped them make informed health decisions and allowed them to save money while accessing importance services. The majority of patients did not know where they would go if the clinic closed and some said they would not receive care anywhere else. Conclusions: The project has provided personal narratives that may help AFHP make the case for creating and maintaining reproductive health services in Arizona. The results show the variety of reasons why people seek services from clinics such as Planned Parenthood and how such services have made a difference in their lives.

PERCEPTIONS OF SEXUAL AGGRESSION IN A BAR SETTING AMONG UNDERGRADUATE MALES. **H. Rafique.** Tucson. MPH Internship Committee Chair: M. Koss, PhD. Site and Preceptor: Relationship Violence Program - Elise Lopez, DrPH, MPH.

Background: Alcohol is a major factor in reported cases of sexual assault. Research has found that areas dense with alcohol serving establishments, like college campuses, are hotspots for sexual aggression. To help bar staff recognize and intervene in moments of sexual aggression, bystander-training programs have been developed. However, few studies have assessed undergraduate males' perceptions of sexual aggression in bars and the potential efficacy of bystander interventions. Objectives: The objective of this study is to better understand undergraduate males' perceptions of sexual aggression in bar settings as well as gauge their attitudes of bystander intervention programs. Data from this study can then be used to improve sexual aggression interventions for bar settings in the future. Methods: Focus groups were set up to gather qualitative data from undergraduate male students at the University of Arizona. However, no participants attended. The methodology was later altered to online surveys. Results: Ten focus groups were scheduled over 5 weeks, yet no males consented to participate in the focus groups. This may have been due to the language used in the recruitment materials, which included wording such as "sexual aggression among males". This could have deterred males from participating. Online surveys have been sent out and at this time, are pending results. Conclusion: No definitive conclusions can be made at this time. One inference that can be made is that males are reluctant to discuss the topic of sexual aggression and are not willing to participate in such studies. This makes studies of this nature difficult to conduct. However, there is still great need for further studies that examine college men's perceptions of sexual aggression in bar settings and their receptiveness to bystander interventions.

POISON AWARENESS AND SAFE STORAGE TRAINING IN PIMA COUNTY FOSTER PARENTS. **N. Paige.** Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Arizona Poison and Drug Information Center - Laura Morehouse, MPH, CHES.

Introduction: The Arizona Poison and Drug Information Center (APDIC) is a first line resource for poison related emergencies, serving 14 out of 15 counties in Arizona. In 2016, poison control centers across the nation received approximately 2.159 million calls for human poison exposures. While peak poisoning frequency occurs in one and two year olds, overall, children under the age of 6 are disproportionately affected by poison related incidences. Children under the age of 6 comprise 46.4% of poison exposures nationwide, and 48% of poison exposure in AZ. Purpose: To assess if poison awareness trainings positively impact perceptions of household product toxicity, safe storage practices, and APDIC utilization among Pima County foster parents. Methods: Two poison awareness trainings were conducted with foster parents from Casa de los Niños and Intermountain Academy. Thirty-three foster parents completed 11 question pre-and-post-tests and participated in a forty five minute focus group. Participant responses including a 30 day follow up post-test were recorded and analyzed. Focus groups were transcribed, and coded using thematic analysis and Atlas Ti8 software to derive pertinent themes. Results: Tentative themes include lack of and need for poison related education in schools, and the importance of widespread safe storage practice to mitigate unintentional child poisonings. The results will be used to inform APDIC outreach efforts and interventions to increase utilization of services, and safe storage practices. Conclusion: Educational sessions focused on the foster parent community help increase APDIC awareness, promote utilization of APDIC services, and educate parents on common household hazards. Future research should focus on addressing perceived toxicity as a method to promote behavior change in foster parents.

AN ANALYSIS OF MATERNAL AND CHILD HOMELESSNESS AND HOUSING SERVICES IN PIMA COUNTY. **B. Finan.** Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Pima County Community Development and Neighborhood Conservation - Margaret Kish, MSW, MPA.

Introduction: Homelessness experienced by mother and children manifests in unique ways and requires a different approach for delivering services than homeless individuals. Homeless families may “double up” with other family members or friends rather than going to shelters or living on the street. This can make linkage to housing services difficult. Pima County Community Development and Neighborhood Conservation (CDNC) plans to identify housing service best practices for mothers and children, as well as barriers to service access for mothers experiencing housing instability. Methods: Building on prior work by MPA and MPH students, a literature review was conducted that focused on mothers’ risk factors for entering, leaving and re-entering homelessness, housing models used for families, and Pima County-specific context and existing services. Stakeholder meetings for housing service providers were held to seek feedback and insight to guide the project’s development and priorities. Mothers utilizing housing services in Pima County completed surveys and participated in key informant interviews to identify access barriers and assess mothers’ experiences of services used. Results: The preliminary results found that mothers were often unaware of services. The women most often learned about services through word of mouth, suggesting that providers may need to market their services differently. Best practices for maternal homelessness included trauma-informed care, rapidly providing housing, allowing families to stay together in shelter, and cash assistance or housing choice vouchers. Conclusion: This work will inform funding decisions and housing service priorities for managing maternal and child homelessness in Pima County. New interns will continue interviewing mothers to further improve CDNC’s understanding of their needs.



ES DIFICIL SER MUJER: THE EFFECTS OF MATERNAL DEPRESSION IN NOGALES, AZ. **K. Sprowl**. Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Mariposa Community Health Center - Gail Emrick, MPH.

Introduction: Mothers can be susceptible to depression during and after pregnancy. Mariposa Community Health Center (MCHC) integrated “Es Dificil ser Mujer”, a course delivered by community health workers (CHWs) to help mothers increase their knowledge of depression. The course objectives are to improve the self-efficacy of mothers and help them access needed services they may not have utilized otherwise. Methods: The project objectives included evaluating recruitment and retention procedures for clients, assessing existing curriculum, and determining client satisfaction. Separate questionnaires were developed and focus groups were conducted with the clients, case managers, and pediatricians at MCHC. The results will be used to inform the development of an evaluation plan. Results: The client focus group included four women who lacked prior knowledge of how depression can affect mothers. Clients reported that as a result of the class they created lasting friendships and gained useful information. MCHC case managers’ reported the importance of maternal mental health and enjoyed facilitating classes related to maternal depression. The pediatricians stated they are making efforts to refer mothers to the class and reiterated that patients have difficulty recognizing signs of depression. Discussion: The focus group data revealed the importance of accessing mental health services and the positive impact the course had on participants. The involvement of CHWs, case managers and pediatricians in the recruitment process is a valuable method to engage women and increase class participation. The clients’ stories revealed a dire need for future program development to address maternal depression in Nogales and further expand the curriculum to meet client needs.

**BUILDING COMMUNITY THROUGH HEARING LOSS EDUCATION. L. Vitkus.**  
Tucson. MPH Internship Committee Chair: S. Carvajal, PhD, MPH. Site and  
Preceptor: Arizona Center on Aging - Rachel Peterson, MPH.

Objective Severe hearing loss reduces quality of life in older adults. Evidence suggests that many older adults with hearing loss do not use hearing aids, one reason being stigma. This project studied the epidemiology of hearing loss, observed Community Health Worker (CHW) training for hearing loss, and analyzed qualitative data from a recent intervention research project to improve community connectedness for older adults living in independent living/assisted living environments (IL/AL). Methods Literature was reviewed on attitudes and self-perceptions for hearing loss and aging, epidemiology and screening measures for hearing loss. A deductive content analysis of pre- and post-intervention surveys was conducted on qualitative data collected in the IL/AL research project. The observed CHW training included a general overview on hearing loss but also included a conversation about normalizing it to reduce stigma. Results The literature review showed stigma exists around hearing loss. Some of it is self-generated, e.g., a hearing aid wearer who feel self-conscious about his hearing loss can generate a negative response in people around him, even if they don't know he's wearing aids. Stigma can also be greater with advancing age, according to the research. Programs that promote education, social support and access to hearing screenings have been shown to be successful in reducing stigma and disparities. Conclusion Hearing loss is a leading chronic condition in older adults, and presents a barrier to quality of life. More educational opportunities are needed to understand the impacts that hearing loss can have for cognitive and emotional health. Hearing technology, like hearing aids and amplification devices, could be used more effectively to encourage social engagement and increase quality of life in older.

ANALYSIS AND MAPPING OF TELEMEDICINE/TELEHEALTH SERVICES WITHIN THE UNITED STATES. **N. Rolig.** Tucson. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: Arizona Telemedicine Program - Ronald S. Weinstein, MD, FCAP, FATA.

Established in 1996, the Arizona Telemedicine Program's (ATP) aim is to improve access to medical services throughout rural Arizona. The ATP has become a regional telemedicine resource center. One of the many services the ATP provides is an online telemedicine service provider directory. Based on an 82-item questionnaire, the directory allows users to search and filter through 123 companies currently providing telemedicine/telehealth services. Upon finding a company of interest, a user is directed to a webpage summarizing its characteristics; pulling information from a database created from the questionnaire. Leveraging access to this database, this research project aimed to index telemedicine/telehealth services currently offered in the United States, characterize their geographic distribution, and create an interactive map, which can be used to navigate the online directory. Using a series of algorithms, it was determined that a total of 68 clinical telemedicine/telehealth services are currently offered in the U.S. Each state, on average, offers 63 services. After conducting a statistical analysis, it was found that the number of clinical services within a state is significantly associated with its: population, land area, and number of companies. To visualize and navigate through the directory, a 68-layered map was created using ArcGIS; each layer depicting the number of companies providing one of the 68 services. When operationalized, the online map will allow users, including health care service providers and medical organization administrators, to intuitively navigate through the directory. The efforts of this project support the public health goals of mobilizing community resources and linking health services.



**Session II:  
1:20 – 5:00**

*Drachman Hall, Room A116 / Phx Building 2,  
Room 2306*

**Abstracts**

ASSESSMENT OF ACCESS AND FUNCTIONAL NEEDS GROUPS WITHIN MARICOPA COUNTY IN RELATION TO EMERGENCY PREPAREDNESS AND RESPONSE. **A. Fitzgerald.** Phoenix. MPH Internship Committee Chair: J. Foote, PhD. Site and Preceptor: Maricopa County Public Health Department - Mitchell Lach- Disease Control Division Administrator.

Introduction: This internship focused on identifying Access and Functional Needs (AFN) populations, what it means, who they are, and what their needs are within Maricopa County. AFN populations are individuals that in the past have been excluded from emergency planning. Examples of AFN include: individuals with disabilities, obesity, chronic disease, poverty, limited English proficiency (LEP), pregnant women, children under 5 and people over 65. Methods: A literature review was conducted over vast amounts of resources from several different agencies on the topic of AFN in emergency planning. Documents were examined to find case definitions of AFN populations. Additional information assessed included how or if other agencies handled AFN populations. Results: A working case definition of AFN has yet to be confirmed but a greater understanding of AFN population characteristics and their numbers has been accomplished. In Maricopa County it is estimated 477,040 people live with a disability, 666,513 individuals live on incomes below poverty level, 782,537 are over the age of 60 years, and 66,437 households are estimated as being LEP. Conclusions: It is shown that more research on AFN is needed as documentation indicates several gaps in information. AFN populations are within every community and understanding these populations' health and service needs will lead to better emergency management and overall greater public health within whole communities.

ARBOVIRUSES TESTING OF MOSQUITO POOLS IN ARIZONA THROUGH PCR QUANTIFICATION. **C. Royal**. Phoenix. MPH Internship Committee Chair: J. Foote, PhD. Site and Preceptor: Arizona State Public Health Laboratory - Kate Fitzpatrick, B.S.

Introduction: As seen in 2012 with West Nile Virus and 2016 with Zika, arboviruses are becoming a widespread concern for healthcare organizations. While Arboviruses have low mortality rates, secondary illness and congenital defects have recently been linked with infection. This project assessed disease carrying rates among trapped mosquitos in Arizona counties and compared Arizona disease trends with National rates. Methods: Arizona State Public Health Lab actively tests and monitors for the five arboviruses: West Nile Virus, St. Louis Encephalitis, Chikungunya, Dengue, and Zika. The Arizona Public Health Lab utilities over 41,600 mosquito traps set throughout the state to catch both Culex and Aedes mosquitoes, the carriers of arboviruses. Mosquitoes from 28,000 traps were tested for arboviruses through DNA extraction and PCR to determine if that area of the state is positive for disease. Results: In 2017, 2% of the tested pools were positive for Arbovirus infection. Arizona accounts for an average of 5.8% of yearly arbovirus cases in the United States. The only Arbovirus positive mosquito populations within Arizona for 2017 are Culex mosquitoes which carry West Nile Virus and St. Louis Encephalitis but not Chikungunya, Zika or Dengue. Counties with positive Culex populations are at an increased risk of human infection. All Aedes transmitted human cases for 2017 in Arizona were confirmed to be travel associated. Conclusions: In the United States, arboviruses have a cyclical infection cycle where the disease will surge one year and then level out to a much lower infection rate. Arizona, while having disease positive mosquito pools and human cases, tends to resist these surges. However, living in and traveling to areas with endemic positive mosquito populations puts individuals at a higher risk of infection.

TATTOO CONSUMER & TECHNICIAN ATTITUDES. **E. Stark.** Tucson. MPH  
Internship Committee Chair: L. Barraza, JD, MPH. Site and Preceptor: University  
of Arizona College of Pharmacy - Elizabeth Hall-Lipsy, JD, MPH.

Background: The tattoo industry is unregulated. Tattoos have been linked to multiple health hazards (e.g., allergic reactions and infections), and many inks are manufactured with carcinogenic pigments, but the FDA has declined to regulate tattoo inks. In some jurisdictions, only the age of the consumer and the permanency of the building are regulated. No identified research studies considered tattoo consumer and tattoo technician knowledge of health hazards. Methods: An on-line survey was completed by 255 University of Arizona students. Participants who reported not having a tattoo were asked about their tattoo attitudes and beliefs. Respondents who had at least one tattoo were asked about their tattoo decision-making process and about any adverse health effects. All respondents were asked if they had researched the safety of tattoo inks. Eleven technicians in Tucson, Arizona were also contacted for a brief, anonymous interview. Technician participants were asked about their training, materials, disclosures, and experience with adverse health effects. Results: Sixty percent of respondents had at least one tattoo. Of those respondents who had experienced a resulting adverse health effect, none sought medical care. Seventy-three percent of respondents indicated that they had never researched the safety of tattoo inks. Technicians were aware of the lack of regulations pertaining to their industry, and yet did not stay up to date on safety training. All technicians interviewed said that they had never known of any customer who later developed an infection. Three technicians said they would support more regulations. Conclusions: This study concludes that a public information campaign and/or legally required disclaimers are appropriate in this market. Legislators should also consider further regulations for technicians.



DEVELOPMENT & EVALUATION OF PUBLIC HEALTH EMERGENCY PREPAREDNESS (PHEP) PLAN FOR TUCSON INTERNATIONAL AIRPORT AIR NATIONAL GUARD (TIA ANG). **N. Patel.** Tucson. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: 162nd Medical Group (162 MDG) - Maj. Richard G. Maldonado, M.Ed.

**BACKGROUND:** Americans rely heavily on government during emergencies. Post 9/11, the U.S. has faced events of bioterrorism, pandemic influenza, and novel biological threats; increasing the role and responsibilities of public health in reducing subsequent morbidity and mortality. TIA ANG unit also known as 162nd Wing (162 WG) is the Air Force's premier F-16 pilot training base with a mission to support war efforts and protect life. **OBJECTIVE:** The first project objective was to establish 162 WG's Mass Prophylaxis Plan (MPP). The second, to train the 162 WG personnel to respond efficiently during a biological event and to evaluate and analyze 162 WG's response capabilities and capacities. **METHODS:** A Draft Version of a MPP was developed by 162 WG's cooperating stakeholders and distributed to the 162 WG's executives for collaborative feedback and approval. A Pandemic Influenza Functional Exercise (PIE) was conducted to provide annual influenza vaccine as a medical countermeasure for 162 WG personnel, and the process was evaluated using Homeland Security Exercise Evaluation Program and Air Force Instruction 90-201. **RESULTS:** The PIE was implemented using the Incident Command System. Forty-four members of 162 MDG operated a mass prophylaxis site with four Point of Dispensing lanes and 435 members of the 162 WG were immunized within two hours. Exercise evaluators and key participants identified 14 strengths, 12 areas for improvement and two discrepancies. **RECOMMENDATIONS:** The MPP be included in the 162 WG's Installation Emergency Mangement Response Plan. The 162 WG annually tests its PHEP capabilities and seek opportunities for capacity development by practicing Full-Scale Exercises to validate its strategic priorities of military medical readiness and its preparedness investments within the military and the local community.

IMPROVING QUALITY SERVICE DELIVERY USING A MYSTERY SHOPPER PROGRAM. **A. Redburn.** Tucson. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Arizona Smokers' Helpline - Adrienne Lent, MBA, MPH.

Introduction: The Arizona Smokers' Helpline (ASHLine) provides tobacco cessation services to the state of Arizona, an important public health service. As part of its service delivery, ASHLine is committed to improving the quality of services delivered, which is expected to increase quit rates. To this end, ASHLine established an internship to design and implement a phone-delivered mystery shopper program to assess organizational structures, staff protocols, and client experiences. Methods: The internship was divided into six phases and given a timeline of 28 weeks for completion. Nine unique personas representing typical ASHLine clients were developed for the mystery shopper program and nine individuals were trained to assume these personas. Each shopper was asked to complete five phone calls and collect data from each call. Five mystery shoppers completed all five calls. Results & Conclusion: Data indicated that ASHLine's organizational structures and processes were efficient at enrolling shoppers for coaching and nicotine replacement therapy (NRT) services. However, the rate of successful contact attempts following enrollment was less than 1 in 3. Measured staff protocols were followed more than 90% of the time. More efforts are needed to reach our target of 100% fidelity. Finally, our shoppers' customer experience ratings were overall positive across all calls with the greatest opportunities for improvement at the beginning of the quit process. This internship shows how public health management plays an important role in evaluating the quality of public health service delivery.

REVIEWING STUDENT BARRIERS TO PUBLIC HEALTH INTERVENTION PROGRAM PARTICIPATION. **G. Flores.** Tucson. MPH Internship Committee Chair: J. Gerald MD, PhD. Site and Preceptor: Arizona Center for Rural Health - Alyssa Padilla, MPH.

Project SHARE was established in 2015 by the Arizona Center for Rural Health to train undergraduate and graduate health professional students to become Certified Application Counselors (CACs). CACs explain health insurance eligibility rules to Tucson and Phoenix residents and help them enroll in either the Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid program, or the Individual Marketplace made possible by the Affordable Care Act. The goal of this internship was to evaluate retention barriers for the Project SHARE program and to evaluate content delivery to improve its long-term sustainability.

Retention of students is a challenge. For example, 41% of students from the 2017 – 2018 cohort exited the program before completion. To explore potential retention barriers, data were gathered through Qualtrics, a web based electronic survey tool for students who completed the program (n=10). The survey had 34 questions in total, with 2 multiple choice questions focusing on content delivery and retention barriers. The remaining 32 questions focused on program content and were formatted with free response, multiple choice and ranking responses. Phone calls were also administered to students who completed the program (n=7) and to students who dropped the program (n=3). Students who dropped the program reported that outside scheduling conflicts with work, school and family were the most important barriers preventing them from enrolling in the program. Students who completed the program reported that orientation training times were inconvenient and too few case-based scenarios were used in training. Based on these results, the Project SHARE program plans to incorporate student suggestions and modify content delivery for the 2018-2019 cohort.

## OBAMA CARE IN THE TRUMP ERA: OPEN ENROLLMENT COMPARISONS. **A.**

**Loffredo.** Tucson. MPH Internship Committee Chair: D. Derksen, MD. Site and Preceptor: Arizona Center for Rural Health - Bryna Koch, MPH.

Although the promise from the Republican party to “repeal and replace” the Affordable Care Act (ACA) has failed, President Trump slashed the ACA marketing budget by 90% from \$100 million to \$10 million on August 31, 2017. Navigator funds (federally supported cooperative agreements to help Americans enroll in the healthcare marketplace) were cut by 40% from \$62.5 million to \$36.8 million and the enrollment window was shortened to 45 days. Decrease in funding for enrollment and marketing efforts, shortening of the enrollment window in states using the Federally Facilitated Marketplace (FFM), political uncertainty regarding the future of the ACA, and an improving economy may have been factors in the 3.7% enrollment reduction between 2017 open enrollment period 4 (OE4) and 2018 enrollment period 5 (OE5). This project through the Arizona Center for Rural Health aimed to describe the overall and sub-group differences between OE2 and OE5 in the states of Arizona and Wisconsin using data obtained from the Center of Medicare and Medicaid Services (CMS).

EVALUATING A FQHC-BASED MEDICAL WEIGHT MANAGEMENT PROGRAM. **L. Driscoll.** Tucson. MPH Internship Committee Chair: H. Strich, MPH. Site and Preceptor: El Rio Community Health Center - Diane Haeger, MBA.

Background: The El Rio Weight Management Program, currently offered to El Rio employees and their families, is a comprehensive lifestyle intervention that focuses on improving health of participants through weight loss and healthy lifestyle changes. Despite its popularity and apparent anecdotal success, the program lacks a formal evaluative component. This project focused on developing an evaluation plan for the program. Methods: Program was formally described including stage of development, theoretical framework (using Social Cognitive Theory), and logic model. Goals and objectives were outlined. Evaluation questions were developed and linked to indicators/performance measures and method of measurement. Feasibility, budget, and resource issues were addressed. Evaluation design was chosen, and an analysis plan for both quantitative and qualitative data was outlined. A plan for how the evaluation will be used, disseminated, and shared was presented. Results: In addition to the development of the evaluation plan, further recommendations were offered based on research of evidence-based programs, professional guidelines, and relevant theory. Recommendations include: more emphasis on exercise, more emphasis on self-monitoring and goal-setting, and less cohorts a year to accommodate evaluation efforts and attendance issues. Conclusions: The El Rio Weight Management Program has the potential to greatly impact the wellness of employees at El Rio. However, that impact will remain unknown if an evaluation is not done. This evaluation plan outlines a way to show program staff what is working and what needs to be improved. Additionally, this evaluation plan can be applied to other wellness programs offered by El Rio, so that program staff can better understand if and how programs are leading to health improvements.

SCHOOL-WIDE NUTRITION INTERVENTION: COMMUNITY-BASED PARTICIPATORY RESEARCH. **E. Corriveau**. Phoenix. MPH Internship Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Capitol Elementary School - Lynette Wiltgen, MSN, RN, CSN.

School-Wide Nutrition Intervention: Community-Based Participatory Research  
Introduction: Increasing access to healthy foods within the school environment is recognized as an avenue to improve student health. Objective: Use community-based participatory research (CBPR) to develop a school-wide nutrition intervention within Capitol Elementary School in downtown Phoenix.  
Implementation: Completed pre-intervention assessments with school stakeholders to determine areas of intervention. Identified priorities included offering students: 1. Increased time to eat lunch 2. Nutrition education 3. Increase access to water 4. More fresh and local produce Priorities addressed collaboratively with community partners and stakeholders. Results: Most notable interventions included school administrators increasing duration of student lunch periods. Funding was received to replace an unpalatable water fountain with a filtered water bottle refilling station for students; although installed after intervention duration. With participation of students and school staff, a school garden and gardening team were created. District nutritionists connected with local food supplier and began sourcing more local produce to school; plans are now in place to expand district-wide. School became a host site for Fresh Express's biweekly mobile produce market. Post-intervention surveys completed with stakeholders to evaluate outcomes and found statistically significant improvements in time students have available to eat ( $p < 0.002$ ), health education with hands on learning ( $p < 0.003$ ), and implementation of farm to school activities ( $p < 0.012$ ) Conclusion: Results are not generalizable, but demonstrates the impact of CBPR in bringing about changes to school-wide nutrition environment.

ANTIBIOTIC STEWARDSHIP IN THE OUTPATIENT SETTING. **R. Chabra.** Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Health Services Advisory Group - Keith Chartier, MPH.

**INTRODUCTION:** In the United States, 30% of antibiotics prescribed in doctor's offices and emergency departments are unnecessary. Antibiotic stewardship is a data-driven program by which healthcare providers can monitor, reduce and prevent misuse and/or overuse of antibiotics. This is accomplished using a multidisciplinary team and strategic approach to educate clinicians and patients. Antibiotic-resistant bacteria cause more than 2 million illnesses and at least 23,000 deaths each year in the United States. To align outpatient providers with the Centers for Disease Control and Prevention's (CDCs) Core Elements of Outpatient Antibiotic Stewardship, Quality Improvement Organizations (QIOs) across the United States are undertaking an initiative to implement the four core elements of outpatient stewardship: Commitment, Action, Tracking & Reporting, and Education & Expertise. These four core elements include evidence-based interventions that improve antibiotic prescribing and use. **METHODS:** Health Services Advisory Group (HSAG), Arizona's QIO, has recruited 69 outpatient locations located in Maricopa and Pinal Counties to participate in the study. **RESULTS:** Within the observed outpatient clinics in Maricopa county, the rate of inappropriate antibiotic prescribing for uncomplicated bronchitis and viral upper respiratory infection was 52% between October 2016 and March 2017. Because of time constraints and scheduling conflicts, we have only met with a limited number of clinics to introduce the core elements, so no post intervention data is available. It is important to also note the effect of the flu epidemic may skew the results. **CONCLUSION:** Overall, following the evidence-based interventions aligned with the CDCs Core Elements of Outpatient Antibiotic Stewardship should improve appropriate antibiotic prescribing and usage.

STRATEGIC PLANNING AND RECOMMENDATIONS FOR THE PRIMARY PREVENTION MOBILE UNIT. **Z. Innabi**. Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Juntos Por La Salud - Eduardo Gonzalez- Fagoaga MA, PhD.

Background: Juntos Por La Salud is a mobile health clinic that is dedicated to providing preventive care to the underserved Hispanic/Latino population in the Southwestern United States. Juntos Por La Salud is currently planning to transition from a primary prevention care mobile clinic to a licensed outpatient treatment clinic. However, it currently lacks adequate funding and staff for this transition. The goal of this internship was to provide direction for the mobile clinic to address the strategic operational and funding issues required to provide outpatient care to the underserved populations around Arizona. Methods: A strategic roadmap was developed that included collaboration with University partners, other mobile clinics, hospitals, and local state and federal governments. Funding sources and staffing options were also researched to help the new the mobile clinic become self-sustaining. Results: Based on this research, viable staffing and funding options were identified through the use of volunteer physicians, philanthropy, contracts and grants and third-party billing. Information was also provided regarding possible partnerships with other mobile health clinics and organizations. This included taking advantage of the network that The University of Arizona already holds with health care providers around Arizona. Conclusion: Recommendations were provided to the mobile unit to assist with a successful transition from a primary prevention mobile unit to an outpatient mobile clinic.



**Session III:  
1:20 – 5:00**

*Drachman Hall, Room A118*

**Abstracts**

WASHTENAW COUNTY HEALTH DEPARTMENT IDEA BUENOS VECINOS LATINO OUTREACH PROGRAM. **L. Thatcher.** Tucson. MPH Internship Committee Chair: M. Ingram, MPH. Site and Preceptor: Washtenaw County Health Department - Adreanne Waller, MPH.

The Washtenaw County Health Department located in Southeast Michigan serves over 360,000 (US Census Bureau, 2016). The Latino population in Washtenaw County is growing rapidly and is disadvantaged by limited access to health care, social support, safe built environments as well as other social determinants of health. The intern worked IDEA Buenos Vecinos (IDEA), an organization that emerged from collaboration between Washtenaw County Health Department, the University of Michigan and members of the Latino community. The purpose of this internship was to assist in developing a youth curriculum focused on personal development as well as to create tools to evaluate IDEA and the efficacy of the curriculum. Throughout the internship, the student worked with IDEA leadership to identify and develop partnerships and goodwill within Washtenaw County for Latino Health Programs. An additional objective of the internship was to build relationships within IDEA itself, the student assisted in organizing a video presenting Latino youth related data, aided in literature review of Spanish Community Interpreters, and supported in current health related education for Latino youth. The results of building partnerships throughout the community was increased support and resources for the Latino community. These relationships were essential to the implementation of the youth curriculum. Follow up on the usefulness of the evaluation tools created and effectiveness of the youth curriculum is recommended to continue to build this impressive collaboration.

PERSPECTIVES OF HISPANIC MALES PARTICIPATION IN A GENDER/CULTURALLY SENSITIVE WEIGHT LOSS INTERVENTION. **D. Campas**. Tucson. MPH Internship Committee Chair: D. Garcia, PhD. Site and Preceptor: The University of Arizona Collaboratory on Metabolic Disease Prevention & Treatment - Luis Valdez, PhD.

Introduction: Hispanic males have the highest prevalence of overweight and obesity in the U.S. Overweight and obesity is associated with a multitude of negative health consequences such as cardiovascular disease and type 2 diabetes. Despite this evidence, Hispanic males are significantly underrepresented in weight loss research. Purpose: To refine methodologies used to deliver a gender- and culturally-sensitive weight loss intervention. Methods: From February 2016-May 2016 semi-structured interviews were conducted with 23 Hispanic men that had completed the ANIMO study. The ANIMO study was a 12-week gender- and culturally-sensitive weight loss intervention, which targeted eating, and physical activity (PA) behaviors. The interviews lasted approximately 45-60 minutes and were conducted in both English and Spanish. Interviews were coded for themes using NVivo software. Grounded in a deductive process, a preliminary codebook was developed based on the topics included in the interview guides. A thematic analysis facilitated the identification of inductive themes and the finalization of the codebook used for transcript analysis. Results: Four overarching themes were identified: 1) strategies used to achieve weight loss/maintenance including counting calories, increasing PA, and recording a daily weight; 2) participants credited their success to having accountability to coaches; 3) participants recommended having more opportunities to interact with other study participants such as group workout/activities; and 4) participants acknowledged their participation had indirect effects on their family members. Conclusion: Hispanic men provided valuable insight on their weight loss experiences and identified core intervention components for future studies.

EVALUATION OF PHARMACOTHERAPY USE IN A COMMUNITY HEALTH CENTER WEIGHT MANAGEMENT PROGRAM. **A. Redmond.** Tucson. MPH Internship Committee Chair: D. Garcia, PhD. Site and Preceptor: El Rio Community Health Center - Diane Haeger, MBA.

Introduction: Obesity and secondary diseases such as type II diabetes mellitus and hypertension are growing concerns in the United States. More than two-thirds of Americans are overweight or obese (BMI  $\geq 25$  kg/m<sup>2</sup>). Typically, lifestyle modifications, including changing dietary and exercise behaviors, are sufficient in the management of overweight and obesity; however, the 2013 AHA/ACC/TOS Guidelines indicate that pharmacotherapy may be necessary in patients with a BMI  $\geq 27$  kg/m<sup>2</sup> and weight-related comorbidities or a BMI  $\geq 30$  kg/m<sup>2</sup> whose weight did not improve with the conservative treatments of diet and exercise. In 2012, the FDA approved the use of phentermine and topiramate dual pharmacotherapy for the short-term management of obesity in individuals for which conservative treatment was ineffective. Tucson's El Rio Community Health Center offers the Weight Management for Optimal Health program to all patients interested in losing weight to improve their health. The 12-week program is based on the 2013 guidelines and combines traditional weight loss methods of lifestyle modification with the approved pharmacotherapy. A participant is considered successful if they lose at least 3% body weight within the 3-month period. Currently, the program prescribes phentermine and topiramate to approximately 80% of participants regardless of treatment history. Purpose: This evaluation explores the effectiveness of El Rio's use of pharmacotherapy in the Weight Management program by examining changes in body weight, blood pressure, hemoglobin A1c, and lipid panel results, and comparing these with literature values. Methods: Data collection and analyses are still in progress.

QUALITATIVE ANALYSIS OF HISPANIC WOMEN'S PERSPECTIVES ON A CULTURALLY APPROPRIATE WEIGHT MANAGEMENT PROGRAM AT EL RIO HEALTH. **A. Resendiz Bedoya**. Tucson. MPH Internship Committee Chair: D. Garcia, PhD. Site and Preceptor: El Rio Community Health Center - Diane Haeger, MBA.

Introduction: Hispanic women have the second highest overweight and obesity rates when compared to women of other races/ethnicities; nonetheless, there are few programs that address the issue at hand. Purpose: The objective of this study was to evaluate the current Weight Management for Optimal Health program that El Rio Health offers to patients and employees. Specifically, this study sought to receive feedback from Hispanic women in order to gain knowledge on what to include in a culturally-appropriate weight management program. Methods: Semi-structured interview questions were developed based on previously used materials. Hispanic women were randomly selected for interviews, which led to the recruitment of 10 past participants of the weight management program and 10 wait-listed Spanish-speaking women. Transcription of the interviews were completed, and key themes were identified using a deductive process. A preliminary codebook was developed, representing main themes from the interview guides. Thematic analysis allowed for further identification of inductive themes. Results: Five main themes that were identified: (1) attitudes about weight management, (2) barriers to weight management, (3) motivators for weight management, (4) recommendations for a culturally-appropriate weight management program, and (5) recommendations for change in the current program. Conclusion: This project emphasized the importance of including the target population in order to assure that the program is meeting their needs. Valuable information was gathered through the interviews, which is necessary to help El Rio move forward with creating a culturally-appropriate weight management program for Hispanic women. The interviews elucidated changes that can be made to the current program in order to improve weight loss success for participants.

MENTORING PROGRAM RECOMMENDATIONS TO BUILD RESILIENCY AMONG PREGNANT AND PARENTING TEENS. **V. Moore.** Tucson. MPH Internship Committee Chair: P. Haynes, PhD. Site and Preceptor: Teen Outreach Pregnancy Services (TOPS) - Laura Pedersen, RN, MSN.

Background: Teen Outreach Pregnancy Services (TOPS) is a non-profit organization founded to address the needs of pregnant and parenting teens in the Tucson community. TOPS provides a variety of services intended to educate and empower teens and young families so they can make informed, healthy decisions. Objective: To further their mission, TOPS aims to develop and implement a mentoring program that will provide further support and empowerment for pregnant and parenting teens. This document will provide recommendations for the development of a mentoring program specific to TOPS and the population they serve. Methods: Qualitative methods were employed to capture information about participant opinions on the structure and implementation of a mentoring program at TOPS. Further information about teen mentoring programs was collected from a review of the current research literature. Results: Focus groups and key informant interviews identified common themes among pregnant and parenting teens including: preferred characteristics of mentors, length of time spent with mentors, communication style with mentors, and activities completed with mentors. Additionally, a review of current literature in teen mentoring revealed successful strategies and practices for structuring and implementing effective teen mentoring programs. Discussion: Recommendations for the development a mentoring program at TOPS are based on the results of qualitative data and current research literature, some of which include careful selection, training, and support of mentors; creating a contract between mentor and mentee to establish goals of relationship; providing the pair with structured meeting times and activities; and monitoring the frequency and quality of mentoring meetings to provide accountability and continuous support of the mentor and mentee.

AMERICAN INDIAN YOUTH WELLNESS CAMP 2017: ADAPTING TO HEALTHY EATING BEHAVIORS. **J. Slowtalker**. Tucson. MPH Internship Committee Chair: N. Teufel-Shone, PhD. Site and Preceptor: Native American Research and Training Center (NARTC) - Francine Gachupin, PhD, MPH.

Background: Obesity is a growing health concern among American Indian adolescents leading to an increased risk of chronic health conditions, such as, cardiovascular disease, diabetes, and high blood pressure. Nutrition is an important aspect to maintaining good health as proper nutrients provides a healthy diet to help prevent further complications to health conditions and diseases. The American Indian Youth Wellness camp invites American Indian youth from tribes across Arizona to a one-week intensive behavioral intervention. The purpose of the camp is to promote positive lifestyle choices by providing experiences and education on healthy eating behaviors and physical activity to prevent the risk of obesity and type 2 diabetes. Methods: The program is evaluated by a pre- and post-public health survey (an outline of overall health), Youth Risk Behavior Survey, and physical assessments to track changes in each adolescent to determine the behavioral changes of camp participants. Both surveys focus on questions in relation to fruits, vegetables, and sugary beverages. Results: A total of 46 youth campers (23 females, 23 males), ages 8-13, participated in the program. The data shows a 11.5% increase of responses to questions regarding the importance of consuming fruits and vegetables. Additionally, questions targeting zero sugared beverages increased significantly by 41.2%. Conclusion: These results illustrate that youth can change of knowledge of healthy food choices during a one-week camp. Long-term interventions demonstrate a decline in weight loss by adjusting both eating and physical activity behaviors. Long-term follow up is recommended to track if youth's increase knowledge translates to behavior change.

UNDERGRADUATE WOMEN'S PERCEPTIONS OF SEXUAL ASSAULT RESISTANCE PROGRAMS. **K. Roberts.** Tucson. MPH Internship Committee Chair: M. Koss, PhD. Site and Preceptor: Relationship Violence Programs, Health Promotion Sciences Department, College of Public Health - Elise Lopez, DrPH, MPH.

Introduction: While many colleges and universities work to improve initiatives to reduce and prevent sexual violence, few programs have been rigorously evaluated and shown to be effective. Moreover, rates of sexual assault victimization on campuses have not decreased despite the many interventions implemented across the nation. Enhanced Acknowledge Assess Act (EAAA) is the first and only evidence-based curriculum proven to reduce a woman's personal risk of sexual assault. This student-led research project addressed undergraduate women's attitudes and perceptions of EAAA, a sexual assault resistance training program. Methods: In-depth focus groups were conducted, with an aim of reaching a minimum of 12 college women at the University of Arizona. Using NVivo qualitative software, an inductive content analysis approach was used to identify themes and patterns (such as barriers and motivating factors to participate) among transcribed interview recordings. Results: The results of this study showed the perceived relevance of EAAA to college women, identified factors which serve as barriers or motivators to potential participation in EAAA, and presented reactions of college women to previously-created marketing materials for EAAA. Conclusion: The implications of this study can be used to inform a targeted recruitment plan for sexual assault resistance training programs for undergraduate women on college campuses. Deliverables— a synthesis of reactions and feedback from focus group participants and explicit recommendations— aim to facilitate the enhancement and improvement of EAAA program marketing and to increase buy-in on behalf of college women.



DESIGNING AND IMPLEMENTING A NUTRITION CHALLENGE IN A WORKPLACE WELLNESS PROGRAM. **E. L. McCrystal**. Tucson. MPH Internship Committee Chair: I. Ramos, MD. Site and Preceptor: Pima Community College Employee Wellness Program - Andrea Lightfoot Bisson, M. Adm.

**BACKGROUND:** The Employee Wellness Program at Pima Community College (PCC) supports the health of 3,000 employees through a multi-dimensional approach to wellness, promoting a culture of health through education and activities. Here we describe ongoing efforts to design and implement a nutrition education intervention program for employees enrolled in the PCC Wellness Program. The goals of the challenge are to provide evidence-based education to empower employees to make healthy food choices and to increase their nutrition and food knowledge. **METHODS:** A 4-week long challenge has been created based on a book written by Dr. Ann Kulze entitled “Eat Right for Life on the Go”. Employees who participate in the program receive a copy of the book. The project also includes design of educational materials, creation of guidelines and procedures, and weekly email communications encouraging participants to adopt nutrition-based behaviors. Pre-and post-surveys will be used to evaluate the challenge. **RESULTS:** Expected results include an increase in participants’ self-perceived knowledge about the nutrition topics covered in the program and short term improvements in healthy nutrition choices.

**CONCLUSION/DISCUSSION:** A nutrition-based employee challenge will add insight to ongoing conversations about workplace wellness program efficacy and facilitate the acquisition of data to evaluate the level of knowledge gained by employees during the 4-week educational intervention program.

EVALUATION OF HITEVI KARI EMPLOYEE WELLNESS PROGRAM. **C. Nez.** Tucson. MPH Internship Committee Chair: S. Sabo, DrPH, MPH. Site and Preceptor: Pascua Yaqui Diabetes Prevention and Treatment Program - Jennie Mullins, MPH.

Introduction: Employees of the Pascua Yaqui Health Department (PYHD), have the opportunity to participate in the Hitevi Kari Employee Wellness Program (HKEWP) with a goal to encourage healthy lifestyle and wellbeing.

Approximately, 19.1% of Pascua Yaqui tribal members have been diagnosed with diabetes. The HKEWP offers a cost effective solution by providing PYHD employees with the following: lessons on nutrition education, physical activity, chronic disease self-management, nutrition counseling and healthy cooking classes, and community wide physical activity events. Objective: The purpose of this internship was to enhance the existing HKEWP and develop an evaluation framework. Methods: A mixed methods approach was used to develop an evaluation framework by observing classes, creating a stakeholder analysis, reviewing and modifying the Centers for Disease Control and Prevention's Prevent T2 curriculum. An Employee Wellness Survey was emailed to current and passed Hitevi Kari participants, to identify the participants' perspective on the HKEWP. Also, two structured feedback sessions were conducted and transcriptions were analyzed qualitatively to identify the participants assessment and views on the HKEWP. Results: Participants gained knowledge and awareness of nutritional foods and were willing to try new types of food and incorporate them into their everyday lives. Finally, participants began sharing the information they learned from the HKEWP with family, friends, and coworkers because they felt that the HKEWP was a great community asset. Conclusion: This evaluation is an important step in implementing an effective employee wellness program for the prevention and management of chronic disease for employers and their workers.

MUJER SALUDABLE ACROSS BORDERS. **M. Gaitz.** Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: The Southwest Institute for Research on Women (SIROW) - Elizabeth Salerno-Valdez, MPH.

Background: The Mujer Saludable on the US-Mexico Border project is a binational collaboration with The Southwest Institute for Research on Women (SIROW) and El Colegio de la Frontera Norte (COLEF) in Nogales, Sonora, Mexico. The curriculum was adapted to educate women about reproductive and sexual health and designed to be delivered by promotoras (community health workers). The focus of the recent version was to improve the curriculum, training, and delivery. Objectives: The internship included a literature review, adaptation of the original Mujer Saludable curriculum and implementing pre and post-tests to ensure that the adapted Mujer Saludable-Promotora curriculum met the women's needs. Methods: Online databases were used to find similar studies to inform the curriculum changes. Community-based participatory research was the guiding framework. Pre- and post-tests were administered at the intervention to evaluate the curriculum. Results: Due to a lack of reliable transportation and other barriers to participation for trainees, it was necessary to condense training from six weekly sessions to two days. Seventeen women participated. There was no significant difference between the pre-and post-test results which might be due to the accelerated training. The trainees may not have had time to absorb the information. Discussion: The evaluation showed no improvement in their knowledge, attitudes, or beliefs about sexual and reproductive health. Trainers should consider long term strategies with members of the community to improve participation and efficacy. The team might consider administering post-tests a second time three to six months after training. Additional methods need to be identified to increase participation in the six week format such as holding the sessions in a central or more accessible location.

DEVELOPING A CARE COORDINATION MODEL UTILIZING COMMUNITY HEALTH WORKERS TO IMPROVE OUTCOMES FOR AJO'S ELDERLY POPULATION. **A.**

**Kaufman.** Tucson. MPH Internship Committee Chair: M. Moore-Monroy. Site and Preceptor: Desert Senita Community Health Center - Lily Williams.

Desert Senita Community Health Center (DSCHC) is a federally qualified health center located in the small community of Ajo, Arizona in western Pima County. According to the US Census, Ajo has a population of 3,304, and 44% of residents are 55 years or older. DSCHC administers primary care services for the town's residents and is the only health care provider in the area. Ajo is considered a frontier community with the nearest emergency room located more than 80 miles away. Due to Ajo's rural location, DSCHC has identified the need to develop a care coordination model which will incorporate community health workers (CHWs) with the ultimate goal of decreasing hospital admissions and improving follow-up care specifically for Ajo's elderly population. Developing a care coordination model which will utilize CHWs to address the social determinants of health affecting hospital admissions will improve overall patient health and outcomes for Ajo's seniors. A community assessment was conducted to identify the relevant social determinants of health that most influence hospital admissions among seniors. Methods included key informant interviews, qualitative data from a community listening session, as well as quantitative data from Ajo's ambulance services and DSCHC's quality improvement team. Data from the assessment will be used to inform a care coordination model which will focus on utilizing CHWs in primary prevention strategies as well as clinical chronic disease management for individuals at high risk of hospital readmission. These efforts will improve care coordination for DSCHC seniors, decrease the overutilization of hospital services, and subsequently improve quality of life for Ajo's seniors.

**Session IV:  
1:20 – 5:00**

*Drachman Hall, Room A120*

**Abstracts**

FACTORS ASSOCIATED WITH ACANTHOSIS NIGRICANS AND BMI IN A CROSS-SECTIONAL SAMPLE OF ADOLESCENT FEMALES (12-17 YEARS) IN RURAL EASTERN GUATEMALA. **K. Parra.** Tucson. MPH Internship Committee Chair: V. Leybas Nuño, PhD, MSW. Site and Preceptor: Jutiapa, Guatemala - Pauline Jolly, PhD, MPH.

Introduction: Guatemala has the highest prevalence of chronic malnutrition among children in Latin America, with a growing population who are overweight/obese. This “double burden of nutrition” is well-documented. Obesity is especially concerning among adolescents, because weight status crosses into adulthood. Acanthosis Nigricans (AN) is an indicator of insulin resistance, and a predictor for Type 2 Diabetes in adulthood among children. The primary objective is to estimate the prevalence of AN and to examine the relationship of AN and body mass index (BMI). Methods: Female adolescents (n=393) aged 12 to 17 living in rural Jutiapa were recruited from a longitudinal cohort study conducted by the Institute of Nutrition of Central America & Panama. Several analyses addressed the objectives including explanatory modeling, logistic and linear regression. Logistic regression analysis was performed to investigate the odds ratio of AN-present by each metabolic factor. Linear regression assessed associations with BMI. Results: The overweight/obese prevalence among adolescents with a BMI >85th percentile was 15% (95% CI: 0.116, 0.188). The prevalence of AN-all is 55% (95% CI: 0.495, 0.593), however the prevalence decreases to 28% (95% CI: 0.233, 0.321) on the neck only. The strongest risk factor associated with AN-all is BMI (OR 1.38, 95% CI: 1.25–1.51). Attending school marginally increased the odds by 2% of having AN-neck (95% CI: 1.07–1.47). Whereas, having dinner in front of the TV lowered the odds of AN-all (OR 0.85, 95% CI: 0.75–0.96). Conclusion: Clinical evidence suggests that prediabetic female adolescents, because of their accelerated reproductive growth and physiology, may become diabetics at a faster pace than adults. Therefore, chronic disease prevention is vital to counter the rise of obesity associated AN.

COMADRONAS, DOCTORS, AND MOTHERS: ROLES, PERCEPTIONS, AND BARRIERS TO COLLABORATION. **A. Mouritsen.** Tucson. MPH Internship Committee Chair: V. Leybas Nuño, PhD, MSW. Site and Preceptor: Antigua, Guatemala - Martha Rees, PhD.

**Background** Rural living, poverty, limited access and availability to care contribute to Guatemala's high maternal mortality rates. Comadronas, midwives, assist roughly 70% of births nationwide. The National Association for the Practice of Anthropology and Occupational Therapy Field School has eight four-week seasons of collaborative partnerships with governmental and nongovernmental organizations and university students in Antigua, Guatemala. Examining Guatemala's perinatal care landscape, interns investigated barriers to collaboration among providers. **Methodology** Three graduate students and one undergraduate from anthropology and public health worked with two Field School faculty conducting 33 interviews with new mothers (n=15), biomedical providers (n=8) and comadronas (n=10) in the departments of Sacatepéquez and Chimaltenango. Conducted in clinics, hospitals, participants' homes and via phone, all but one interview was recorded. Interviews covered topics ranging from perinatal complications to quality of care. Tool development and pilot testing concluded in the first week of June 2017 with interviews completed by the third week. **Results** Barriers to collaboration between comadronas and biomedical providers included: disrespect, lack of understanding, limited interactions, training and equipment disparities and quality of care. Mothers perceived comadronas' care as more comfortable and culturally appropriate while doctors' care was viewed as overall superior due to equipment. **Conclusions** Comadronas and biomedical providers are essential for Guatemala's perinatal care. A bi-directional exchange of knowledge between comadronas and biomedical providers is recommended. The expertise of both types of providers must be recognized and shared horizontally in order to improve health outcomes for mothers and infants.

THE EFFECT OF BABY-WEARING ON BREASTFEEDING IN YOUNG MOTHERS. **R. Miles.** Tucson. MPH Internship Committee Chair: V. Leybas Nuño, PhD, MSW. Site and Preceptor: Arizona State University, School of Social Work - Lela Rankin Williams, PhD.

Background: The breastfeeding recommendation is exclusive breastfeeding for the first six months of an infant's life. Thereafter, the recommendation is breastfeeding plus nutritious solids for at least one year. Breastfeeding has many benefits. It reduces the risk of chronic diseases, infectious morbidity, and mortality such as Sudden Infant Death Syndrome (SIDS). Despite its benefits, young mothers are less likely to initiate and maintain breastfeeding as compared to older mothers. Few studies have investigated the effect of baby-wearing on breastfeeding duration. This study explores the association between baby-wearing and breastfeeding in young mothers ages 15-25 years. Methods: The current study is a secondary analysis of data collected from 55 young mothers that were enrolled in programs at the Teen Outreach Pregnancy Services (TOPS) or Child and Family Resources, Inc. (CFR) that had an infant less than one month of age at recruitment. Mothers were randomly assigned into the experimental group (n=28) that received a baby-wearing device (carrier) and safety training or the control group (n=27) that received a high contrast baby book set and did not receive a carrier. Data collection occurred through at-home interviews shortly after birth, at 3 months, and at 6 months. The duration of baby-wearing was monitored through weekly text messages. Results: As the duration of baby-wearing increased, the length of breastfeeding increased ( $p < 0.01$ ). Furthermore, mothers that babywore have a greater odds of breastfeeding at least six months than mothers who did not baby-wear (OR: 1.08, 95% CI: 1.00-1.15). Conclusion: The use of baby carriers seems to promote breastfeeding in young mothers.



EVALUATION OF INTERCULTURAL HEALTH PROGRAMMING IN SANTIAGO, CHILE. **H. Moretz.** Tucson. MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor: La Florida, Santiago, Chile - Ana Maria Oyarce, PhD, MPH, MSSc.

Background: Intercultural health (IH), defined as the integration of western and indigenous medicine, is a public health approach that aims to reduce the divide between indigenous and biomedical health systems based on mutual respect and equal recognition of both knowledge systems. In Chile, IH has become a national strategy of indigenous health improvement through the Programa de Salud y Pueblos Indígenas. With increasing Mapuche populations in urban centers, it is important to understand how these initiatives are conceptualized in urban settings. Method: Through a qualitative assessment consisting of 10 in-depth, semi-structured interviews, this project sought to understand how IH is implemented in the La Florida municipality of the Metropolitan Region. Results: Results revealed that the current IH model is inadequate to meet the needs of the urban indigenous population. Constitutional recognition of the Mapuche people and culture was considered prerequisite to restructure the IH model. Issues of lack of funding, political favoritism, and a fundamental misunderstanding of Mapuche culture were seen as challenges to improving IH programs and indigenous health outcomes. Conclusion: Efforts to improve IH must take into account the indigenous concept of health and healthcare without forcing it into a biomedical model. A more comprehensive curriculum of indigenous healthcare and culture in general and medical education is critical to improve cross-cultural collaboration. An evaluation framework for funding mechanisms of IH at the regional level is needed to improve transparency and accountability among the Health Services and indigenous associations. More research should be conducted in other urban areas with high indigenous populations to gather more representative data on IH implementation in the Metropolitan Region.

UNICEF LESOTHO NUTRITION TEAM INTERVENTIONS. **S. Rosenblum.** Tucson.  
MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor:  
UNICEF Lesotho - Nozizwe Chigonga, BS, MPH.

The primary activities of this internship experience were to assist the Ministry of Health, Lesotho and the UNICEF office in Lesotho in undertaking the development of integrated trainings to address Moderate Acute Malnutrition and Severe Malnutrition. These activities were conducted from June to August 2017, under the supervision of these two agencies. Due to the ongoing El Nino drought, nutrition programming has become a high priority of The Ministry of Health and UNICEF in Lesotho. To address the impact of the nutritional challenges created by the El Nino drought, the country is receiving food aid, and the Ministry of Health and UNICEF are training nurses in the management of malnutrition. To obtain baseline data necessary for the assessment of the impact of these programs on the nutritional status of women and children, the Ministry of Health and UNICEF initiated the collection of baseline data in 10 districts in the country. This internship explored the trainings and protocol in place in developing an integrated approach to the treatment of severe versus acute malnutrition, outpatient versus inpatient protocol as well as records efforts to create a robust surveillance system in the country of Lesotho. This internship included observing country-wide collaborative meetings of all stakeholders pooling data together to create the Vulnerability Assessment Report. I was able to improve my skills in the three core public health functions of assessment, assurance, and policy by helping to set up monitoring systems and educating nurses on the proper WHO protocol. This helped assure a properly trained workforce in the country of Lesotho. I was also able to develop a policy brief, which informed the incoming government on UNICEF recommended guidelines and goals.

ONE HEALTH PERSPECTIVE ON ANIMAL AND ENVIRONMENTAL THERAPY FOR HUMAN HEALTH. **P. Lauro.** Tucson. MPH Internship Committee Chair: K. Pogreba-Brown, PhD, MPH. Site and Preceptor: Desert Milagros - Faith Sauso, PhD.

Desert Milagros offers outpatient treatment programs for teens and adults with eating disorders, trauma recovery and mental health. In part of their treatment program, Desert Milagros offers “Equine- Assisted Learning” and “Eco-therapy” as a method of therapy through direct contact with nature. As an MPH intern, I worked closely with the patients and staff at Equinox Ranch in Arivaca, Arizona to conduct a program evaluation from a One Health perspective. More specifically, I evaluated the health and safety of the patients in the program, the animals at work, and the environment of the ranch. Following my observations and evaluations, I performed a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and created solutions to enhance and maintain the co-existing relationship between humans, animals and the environment.

THE RESEARCH EXPERIENCE & LATINA BREAST CANCER SURVIVORS HEALTH DISPARITIES. **T. Sosa.** Tucson. MPH Internship Committee Chair: P. Haynes, PhD. Site and Preceptor: Arizona Cancer Center/Pace Laboratory - Thaddeus W. Pace, PhD.

Background: The Hispanic Stress Cancer Disparities study explores the stress-based health disparities in Latina breast cancer survivors. The research is significant because breast cancer is the top cause of cancer mortality for Latinas, despite the fact that the incidence of breast cancer among Latinas is lower than Black or White women. Latinas are less likely to receive mammograms. Although the inclusion of Latinas in research is paramount to reducing health disparities, the population remains reluctant to engage in research and low enrollment remains a significant barrier. Methods: The focus of the study is on Latina participation in the Trier Social Stress Test (TSST), a gold-standard, experimental paradigm using an induced stress response during a laboratory research study to evaluate stress biomarkers. A post-TSST interview was administered to gather qualitative data to help inform and guide future research into psychobiological, stress-based health disparities in Latina breast cancer survivors. Qualitative methods were used to evaluate the Latina study subject experience post-TSST to increase protocol engagement and adherence. In addition, a literature review was conducted to inform best practices in research with Latinas. Results: Literature review results discuss the importance of Latinas' cultural background and its influence on recruitment, study engagement and adherence. Low subject participation in the research protocol delayed gathering qualitative data collection, which is ongoing. Discussion: Not unlike other People of Color, Latinas experience mistrust in the research process. Latinas expect transparency and culturally-tailored messaging reflected in research interactions, allowing for opportunities informed by patient-centered outcomes research.

EVALUATION OF CULTURALLY RELEVANT TOBACCO VIDEOS AMONG AMERICAN INDIAN YOUTH. **H. Clark.** Tucson. MPH Internship Committee Chair: S. Sabo, DrPH, MPH. Site and Preceptor: Winslow, Arizona (Black Hills Center for American Indian Health) - Patricia Nez Henderson MD, MPH.

Background: While cigarette smoking prevalence within the US general population has been declining, American Indians (AIs) continue to experience increasingly higher rates of smoking, especially among Navajo youth. Further complicating matters, the expanded use of commercial tobacco products for cultural practices blurs the line between ceremonial and recreational tobacco use, a challenge not seen in non-AI communities. Developing culturally appropriate interventions for AIs is a fundamental step in addressing tobacco control concerns. Objective: This internship aimed to explore the effectiveness of a culturally relevant curriculum among AI youths through a participatory evaluation of tobacco videos and activities guided by the Navajo Traditional Healers Digital Story Project and Navajo worldviews on tobacco. Methods: Two culturally relevant tobacco video, demonstration, and group discussion sessions were conducted with a total of 43 AI students from 9th to 12th graders in Northern Arizona. Pre-and post-evaluation tests assessed knowledge change and ability to explain the history, role and influence of commercial tobacco use in AI ceremonies. Wilcoxon signed rank test was used to analyze the differences in pre and post-test results. Results: Youths' knowledge and ability to explain the history, role and influence of commercial tobacco use in AI ceremonies significantly increased significantly. Conclusion: This pilot study is the first step toward understanding the usefulness, efficacy, and long-term sustainability of the culturally relevant tobacco interventions for AI youth.

EVALUATION OF THE ENHANCED RECOVERY AFTER SURGERY PROGRAM AT CARONDELET ST. JOSEPH'S HOSPITAL. **E. Ronan.** Tucson. MPH Internship Committee Chair: K. Ernst, PhD, MPH. Site and Preceptor: Carondelet St. Joseph's Hospital - Chase Currie, MPH and Lisa Hymson, MPH.

In May 2016, Carondelet St. Joseph's Hospital adopted changes to the care of colorectal surgery patients based the Enhanced Recovery After Surgery (ERAS) Society's recommendations, with the intention of minimizing physiological disruption during surgery and optimizing recovery. A retrospective analysis was employed to evaluate the ERAS program. The intervention group was composed of patients who underwent colorectal surgery between May 2016 and May 2017, and the control group included patients who underwent surgery between October 2015 and April 2016. Individuals were matched on the variables of surgery type and ASA score. Overall, there were 100 patients included in the analysis and there were 50 patients in each group. The outcomes were length of stay, readmission within 30 days, and the amount of opioid medications used during the hospital stay. ERAS program participants had a length of stay that was 1.3 days shorter than patients who did not participate (95% CI: -2.4,-0.2) when adjusted for age, gender, surgeon and surgical technique (laparoscopic or open). There was no statistically significant difference in the odds of readmission within 30 days (OR=0.5; 95% CI: 0.1, 1.7) when adjusted for the same variables. Additionally, there was not a significant difference in opioid use between the two groups (Mean difference=11.2 mg; 95% CI: -34.1, 56.6) when adjusted for the same variables, length of stay, and recent history of opioid use. In conclusion, ERAS program participants had a shorter length of stay than patients who did not participate in the program, but there was no difference in their odds of readmission or opioid use. These results suggest a possible improvement in patient recovery following the implementation of the ERAS program; however, additional research with a larger sample size is necessary.

ANALYSIS OF ANTIMICROBIAL PEPTIDE EXPRESSION IN TRANSGENIC (TG) AEDES AEGYPTI TO ASSESS THE EFFICACY OF TG MOSQUITO RELEASE AS A VECTOR CONTROL STRATEGY. **R. D. Woosley**. Tucson. MPH Internship Committee Chair: K. Ernst, PhD, MPH. Site and Preceptor: The Riehle Lab at the University of Arizona - Michael Riehle, PhD, MS.

The use of vector control strategies to reduce the spread of vector borne diseases have proven effective, but new strategies have been slow to develop due to a lack of research and technology. One of these strategies, the development and release of transgenic (tg) vectors with reduced transmissibility, has shown promise but has seen limited use. To aide in understanding the efficacy of transgenic *Aedes aegypti* (*Ae. aegypti*) mosquitos, this study analyzed the expression of 11 antimicrobial peptides in wild (wt) and transgenic (tg) populations to assess the immune fitness of the transgenic mosquitos. Mosquitos from lab maintained colonies were subjected to 1 of 3 different inoculation treatments (sham, gram +, gram -) or used as an untreated control. This procedure was repeated 4 times, with treatment occurring at varying times relative to blood feeding. Four hours after treatment, the mosquitos were frozen. RNA was extracted and converted to cDNA via PCR. The expression levels were determined by rtPCR. Differences in expression levels in tg and wt populations for each treatment and time point were compared (results pending). The results will be used to predict how the transgenic phenotype would fare in the wild, and how the frequency of the transgene would change over time. These laboratory tests are the first step in developing an effective tg line. Following laboratory testing, semi-field testing will determine the transgene's effects on lifecycle, behavior and interactions with the environment. Equally intricate questions, such as the impact of the tg mosquitos on the ecosystem and the public perception of the intervention, must also be answered. These questions will require cross collaborations among multiple disciplines.

HEALTHY 2B ME (H2BM): MODIFICATION OF A PUBLIC-HEALTH THEMED SUMMER CAMP FOR TUCSON REFUGEE YOUTH HEALTHY 2B ME (H2BM): MODIFICATION OF A PUBLIC-HEALTH THEMED SUMMER CAMP FOR TUCSON REFUGEE YOUTH. **L. DeBoer**. Tucson. MPH Internship Committee Chair: C. Thomson, PhD, RD. Site and Preceptor: Canyon Ranch Center for Prevention and Health Promotion - Nicole Bergier, BA.

Background-Healthy 2B Me (H2BM) is a public health-themed summer camp for underserved youth in Tucson. The aim of H2BM is to educate and empower youth to engage in and sustain positive health behaviors. H2BM has served over 300 children to date. Prior evaluations identified the need for a refugee-specific camp culturally tailored to community needs. Objectives-To modify existing H2BM curriculum and develop, implement, and evaluate a one-week pilot-camp for Tucson refugee youth in the summer of 2017. Methodology-H2BM's week-long curriculum was modified for Tucson refugee youth through the formation of a camp committee with key community stakeholders, including Refugee Focus CENTER's director, staff, refugee youth, and Dietz K-8 School's administration. Discussion groups were held to identify health-specific themes and curriculum content. This committee selected the site, daily schedule, and appropriate age of participants based on approved curriculum, as well as necessary resources for camp (e.g., translators, culturally-relevant activities, and items for family wellness kits). Camper knowledge, attitudes, and behavior change were assessed using a mixed-methods approach. Pre-and post-surveys were administered and qualitative data was collected through a final poster presentation. Results-Survey data from 19 campers demonstrated increases in knowledge of sun safety (pre-47%; post-84%; increase of 37%), identification of specific food groups (pre-53%; post-63%; increase of 20%), and amount of daily recommended physical activity (pre-26%; post-63%; increase of 37%). Conclusions- H2BM provided a valuable experience for refugee youth with noted improvements in camper knowledge and attitudes related to health themes. Curriculum will be revised based on stakeholder feedback for 2018.



**Session V:  
1:20 – 5:00**

*Drachman Hall, Room A122*

**Abstracts**

HITS CONSORTIUM EXPERIENCE: CATALYZING CHANGE THROUGH WORD CLOUDS. **R. D. Contreras**. Tucson. MPH Internship Committee Chair: K. Reynolds, MSPH, PhD. Site and Preceptor: HITS Consortium - Christine Greene, MPH, PhD.

Background: Healthcare-associated infections (HAIs) are a major public health concern. One organization working to advance the field of infection prevention (IP) is the Healthcare Infection Transmission Systems (HITS) Consortium, a collaborative group of leaders from an array of professional backgrounds. At the 2017 HITS Consortium Conference, attendees discussed current IP practices and brainstormed innovative, multifaceted approaches to reducing HAIs. This project aimed to identify which goals/interests were shared by attendees and develop a word cloud to inform the planning of the 2018 HITS Consortium Conference. Methods: Feedback materials from the 2017 conference were used to perform word counts and identify the shared goals/interests of conference attendees and develop a word cloud graphic. Word counts also helped: select the conference theme Catalyst for Change, inform the development of focus groups, identify conference speakers, inform the development of a call for abstracts/posters, develop a conference newsletter. A reference table was also created to centralize information on healthcare facility hygiene interventions and their efficacy. Results: Common themes identified via word counts: research/data, standards/best practices, technology/innovation, risk assessment, surface contamination, building design, hand hygiene, transmission routes. Deliverables: word cloud graphic, calls for abstracts/posters/speakers, newsletter material, speaker benefits infographic, hygiene intervention reference table, internal HITS communications. Conclusions: Conference attendee feedback is vital for identifying common goals/interests in inter-professional groups. Feedback can prioritize program planning/development to optimize efficiency and facilitate inter-professional collaboration on common goals/interests.

EFFECTIVENESS OF AN INSTRUCTIONAL MODULE ON IMPROVING HAND HYGIENE PRACTICES IN AN OFFICE SETTING. **F. Garavito**. Tucson. MPH Internship Committee Chair: M. Verhoughstraete, PhD. Site and Preceptor: ESRAC - Kelly Reynolds, MSPH, PhD.

Research shows that contact between hands and inanimate surfaces plays an important role in the dispersal of pathogens, and is associated with infection and subsequent disease. An effective and inexpensive way to reduce the spread of pathogens in communal spaces such as offices, classrooms, and hospitals is the practice of hand hygiene (i.e. hand washing and use of hand sanitizer products). An electronic survey to collect data about hand hygiene behaviors and perceptions was developed and administered in an office setting where an assessment of pathogen transmission had been performed. The survey contained a teaching module with a video on proper hand washing techniques, as well as hand hygiene facts and tracer data specific to that office location. 41 participants with a work space in that office responded to the survey. Out of 23 participants who received a free hand hygiene bundle as part of a tracer study and completed the survey, only 39 percent used the products more than once a day. 76 percent of survey participants believe that they could better their hand hygiene practice by improving their scrubbing technique and time spent scrubbing, 15.8 percent by running their hands under water longer, and 13.7 percent by improving their "exit strategy" when leaving the restroom to avoid recontamination. 46.5 percent of participants reported that the training would definitely have an impact on their hand hygiene practices, 46.5 percent said the module may improve hand hygiene practices, and seven percent said that the module had no effect on them. Implementation of training modules with facts and statistics relevant to individual work environments on a yearly basis during cold and flu season could lead to an increase in hand hygiene practices and subsequently to a decrease in infection incidence.

COMMUNITY TEACH-IN TO ADDRESS HEALTH CONCERNS RELATED TO TUCSON INTERNATIONAL AIRPORT AREA SUPERFUND SITE EXPOSURES IN SOUTHSIDE TUCSON. **K. Tham.** Tucson. MPH Internship Committee Chair: P. Beamer, PhD. Site and Preceptor: Pima County Health Department - Kristin Barney, MA.

The Tucson International Airport Area Superfund site is among the oldest and most studied trichloroethylene contamination sites in the United States. Still, the community calls for environmental justice more than three decades later, intensified by recent discoveries of emerging contaminants of concern and evolving safe water standards. The University of Arizona College of Public Health and the Pima County Health Department hosted a Teach-In forum for community members to voice concerns, receive environmental health education and inform potential solutions. The Teach-In included expert panel sessions, healthcare screenings, historical geographic mapping displays, community story documentation, workshops and a resource fair. Group-facilitated listening sessions identified high priority concerns as: mistrust with officials, lack of accurate and transparent medical record keeping, unclear statements about disease causation and exposures, access to adequate health care, land use safety concerns, need for additional education and prevention of future environmental contamination. The processes of the development, participation, and community-informed resource planning of the Teach-In laid preliminary groundwork for future community-based participatory research. As analytical methods and scientific knowledge evolve, more communities will confront environmental contaminants that may have unknown health outcomes. A Teach-In represents a tool for community representation, broader engagement in environmental health issues, capacity building, and a platform to drive their own self-identified priorities in advocating for environmental justice.

DEVELOPMENT OF A VISUAL ACUITY QUESTIONNAIRE IN SUPPORT OF A CLINICAL TRIAL ON THE SHORT-TERM EFFECTS OF CARBIDOPA-LEVODOPA IN NEOVASCULAR AMD. **C. Christensen.** Tucson. MPH Internship Committee Chair: H. Brown, PhD, MPH. Site and Preceptor: Tucson Eye Care - Robert Snyder, MD, PhD, PC.

Introduction Macular Degeneration is the leading cause of blindness in patients over the age of fifty and Exudative Age-Related Macular Degeneration (Wet AMD) is the most severe form of this disease. Anti-VEGF ocular injections may only prolong symptoms and are the current gold standard therapy. Methods Wet AMD patients age fifty to eighty-five were dosed daily with Carbidopa-Levodopa tablets for five weeks in a non-randomized, open-label, and parallel assignment fashion. Patients were examined at the end of each week with a visual acuity questionnaire, retinal imaging, and eye health examination. Weekly questionnaire scores ranged from 10 (best) to 50 (worst) on a five-point Likert Scale. Background literature review on visual acuity questionnaires and trial interview runs were required prior to first administration. The visual acuity questionnaire aimed to provide insight into the subjective visual acuity experience of patients throughout the duration of the trial. Results Four patients have been enrolled and three patients have completed the study. Two of the patients showed a reduction in weekly visual acuity questionnaire scores. A small range of scores (10-12) were obtained. Two of the patients demonstrated slight improvements in measurements throughout their time in the study, while the third displayed negligible results. Discussion Too few patients have completed the study for a serious discussion of the study results. Nonparametric analyses and descriptive statistics need to be performed upon its conclusion. An overall improvement in subjective patient responses, central retina thickness, and visual acuity give early promise for the treatment of Carbidopa-Levodopa for Wet AMD patients.

ENHANCED SURVEILLANCE OF HEAT-RELATED ILLNESS IN PINAL COUNTY: A QUALITY IMPROVEMENT PROJECT. **D. Kent.** Tucson. MPH Internship Committee Chair: E. Bedrick, PhD. Site and Preceptor: Pinal County Public Health Services District - Rachel Zenuk, MPH, BS.

Introduction: Extreme heat is a major cause of weather-related morbidity and mortality in the United States. More than 65,000 emergency room visits occur for acute heat-related illness (HRI) each summer. In Arizona, HRI accounts for an estimated 2,000 emergency room patients and 118 deaths each year. In Pinal County, understanding the magnitude and risk factors of HRI is important for informing prevention efforts and developing strategies to respond to extreme heat. Methods: HRI hospital visits were reviewed from hospital discharge data (HDD) from 2010-2016. HRI visits during the summer of 2017 were identified and reviewed using ESSENCE. A survey was developed, and individuals identified in ESSENCE were contacted for phone interviews. An exploratory analysis was performed for the data from HDD, ESSENCE, and interviews. A Wilcoxon Rank-Sum Test and Fisher's Exact Test were conducted to analyze differences between occupational-related HRI visits and other activity-related HRI visits. Results: Pinal County Public Health Services District identified 1,321 HRI visits from 2010-2016, an average of 189 per year. Hospital discharge data suggest HRI visits are more likely to occur in males between the ages of 20-44 years old (27%). For the summer of 2017, 149 HRI visits were identified. Out of those individuals, 31 were interviewed. Interview data indicated occupational exposure to extreme heat as a major risk factor for HRI, although interview results are not conclusive because the data was from a small sample size. Conclusions: Syndromic surveillance combined with interviews and a review of HDD provides an informative approach for monitoring and responding to HRI. Enhanced syndromic surveillance is recommended to gain information for informing prevention efforts on HRI in Pinal County.

COMMUNITY WATER QUALITY ANALYSIS IN THE ECUADORIAN AMAZON. **C. Diaz-Combs**. Tucson. MPH Internship Committee Chair: M. O'Rourke, PhD. Site and Preceptor: Lago Agrio, Ecuador - Donald Moncayo.

**Aim:** Water quality in Lago Agrio, Ecuador was evaluated during July 2017 on household drinking water. Sixty houses using rainwater or groundwater as the main drinking source were evaluated. Water samples were tested for microbial (*Escherichia coli* and total coliforms) and trace metal contamination. **Methods:** For microbial analysis, 3M Petrifilm *E. coli*/Coliform count plates were used for enumeration. For trace metals, the samples were analyzed using inductively coupled plasma mass spectrometry (ICP-MS). I administered questionnaires to measure overall exposure to the water. The questionnaires were completed by the person present in the household at the time of sample collection. The neighborhoods where the samples were collected were predetermined based on scoping visits. Water quality was compromised if contaminants exceeded any of three standards (United States Environmental Protection Agency (US EPA), World Health Organization (WHO), the Ecuadorian Ministry of the Environment (INEN)). **Results:** *E. coli* and coliforms were present in 28% of samples, manganese was present in 12% of samples and lead was present in 8.3% of samples. *E. coli* and coliforms were above standards for EPA, WHO, and INEN. Lead and manganese were above standards for US EPA, but not WHO. Two community information fliers were created providing information about the contaminants and suggestions on how to maintain safe drinking water. **Recommendations:** Suggestions to eliminate contaminants included: adding chlorine or bleach) to water, changing or cleaning filters, washing reservoirs and taps where water is consumed, washing hands, covering buckets containing drinking water, and boiling water before consumption. In March 2018, these flyers were presented and distributed within the communities where the water samples were collected.

PATH TO WELLNESS: EVALUATION OF A CHRONIC KIDNEY DISEASE SCREENING PROGRAM. **D. Kitts.** Tucson. MPH Internship Committee Chair: L. Dennis PhD, MS. Site and Preceptor: National Kidney Foundation of Arizona - James Ivie, PhD.

Introduction: Over 13% of the U.S. adult population is estimated to have Chronic Kidney Disease (CKD), with nearly 50% of all CKD cases being caused by diabetes. An intervention model called Path to Wellness was developed by the National Kidney Foundation of Arizona to provide free quarterly health screenings for CKD and diabetes within the underserved communities of Maricopa County. This program seeks to engage more participants over time as it improves its resources for patients diagnosed with a chronic disease. Methods: The Path to Wellness program is an observational study that is composed of two phases. Phase 1 is the implementation of the screening event each quarter. On average, each screening prepares for 130 participants that receive blood and urine tests with a physician consult. Physical measurements are recorded from each participant in addition to the registration status for a healthy living workshop. Phase 2 is the follow-up phase that tracks the completion rate of participants who registered for a healthy living workshop. Results: Phase 1 of the screening program indicates that 1,083 individuals have been screened since the implementation of the program in 2013. From the screening, 9% of individuals have been diagnosed with diabetes and 6% of individuals with CKD. A total of 62% of screening participants did not have health insurance. Phase 2, tracking the workshop completion is ongoing. Conclusion: The Path to Wellness program is successfully targeting low-income groups by screening participants that do not have health insurance and providing educational resources for those who are at risk for CKD and diabetes. Ultimately, the engagement between participants and resources to manage chronic disease risks can help diminish the overall rates of CKD and new dialysis patients in Arizona.



STATISTICAL ANALYSIS FOR METABOLOMICS AND CLINICAL RESEARCH DATA. J. Ho. Tucson. MPH Internship Committee Chair: D. Roe, DrPH. Site and Preceptor: University of Arizona Cancer Center - H-H. Sherry Chow, Ph.D.

The prevalence of overweight and obesity has increased dramatically for both adults and children. A recent survey by the US Centers for Disease Control and Prevention indicates that 66% of the US population is overweight, with 32% considered obese. For women, overweight and obesity are associated with an increased risk for postmenopausal breast cancer. Increased breast cancer risk is likely to be attributed to multiple metabolic disturbances stemming from increases in estrogen concentration, insulin resistance, inflammatory cytokines, and oxidative stress. Resveratrol, a compound found in plant species and food products such as grapes, peanuts, and berries, has been shown to increase insulin sensitivity, decrease oxidative stress, and may demonstrate chemopreventive activity. In addition, resveratrol has been shown to inhibit aromatase, an enzyme that converts androgens into estrogens. The objective for this study was to quantify changes in metabolites in plasma and urine samples among 36 participants treated with resveratrol as part of a clinical trial. Metabolite concentrations were assessed with mass spectrometry, using a paired t-test to examine significant differences between pre- and post-intervention with resveratrol. Principal component analysis was used as a data reduction technique to examine correlations between metabolites. The results of this analysis showed that 240 metabolites had significantly different concentrations from the paired t-test after adjustment with the Benjamini & Hochberg (1995) correction, and principal component analysis showed that 48% of the variance was explained by 6 components. Identification of metabolites and principal components is ongoing with the investigators.

ANALYSIS OF THE RELATIONSHIP BETWEEN THREE COMMON ALLERGENS AND QUANTITATIVE AND QUALITATIVE MEASUREMENTS OF ASTHMA SYMPTOMS AND SEVERITY. **E. Tompkins**. Tucson. MPH Internship Committee Chair: D. Roe, DrPH. Site and Preceptor: Asthma and Airway Disease Research Center - Michael Daines, M.D.

Intro: Chitin, glucan, and endotoxin are three common allergens present in work and living spaces which affect asthmatics and other airway-hypersensitives. They originate from fungus and arthropods, grains and other plants, and bacteria, respectively. The analysis aimed to identify relationships between asthmatic response to allergen levels, as well as the association between allergen levels from associated causes in living spaces. Methods: Data was acquired from the Inner-City Anti-IgE Therapy for Asthma (ICATA), a randomized control trial performed in eight cities. Quantitative and qualitative data consisting of dust sample allergen levels, biological measurements and participant reports regarding their health and living situations were collected. Correlation coefficients were generated between relevant variables and the levels of allergens in the corresponding participant's living space. Wilcoxon rank-sum analysis was employed on binary variables. Analyses were stratified by location to identify whether there was clustering by location. Results: Chitin was significantly correlated with 27 of 80 variables; most notably were the participant responses for "participant feels unable to get things done at home/work due to asthma" ( $r=0.2465$ ,  $p=0.0088$ ) and "patient felt they couldn't keep up with others in the past week" ( $r=0.2592$ ,  $p < 0.0001$ ). Endotoxin was significantly associated with 9 of 80 variables. When stratified by location, the same pattern of associations appears the same, but there did not seem to be any clustering by location. Conclusions: The analysis suggests chitin is the most predictive variable of asthma-related symptoms and biological predictors reported. Thorough cleaning of participants' living spaces and removal of arthropod pests would likely have the highest impact of reducing asthma symptoms.

THE HEALTH CARE BURDEN OF ADULT EMERGENCY DEPARTMENT VISITS AND SUBSEQUENT HOSPITALIZATION FOR URINARY TRACT INFECTION: AN ANALYSIS OF NATIONWIDE EMERGENCY DEPARTMENT SAMPLE DATA OF U.S. HOSPITALS, 2006-2011. **U. Zahid.** Tucson. MPH Internship Committee Chair: D. Roe, DrPH. Site and Preceptor: University of Arizona - Katherine Ellingson, PhD.

Background: Emergency department (ED) utilization has been increasing for the management of acute conditions such as Urinary tract infections (UTI).

Objective: The aim of this study was to examine UTI related ED utilization, subsequent hospitalization, and corresponding economic burden in elderly patients aged 65 years or older. Methods: For this study we analyzed the data of nationwide emergency department sample (NEDS) in which UTI (ICD-9-CM codes 599.0, 595.0, 590.X) was the primary diagnosis in ED from 2010 to 2014. NEDS is the largest all payer database in the US that collects data from more than 950 hospital EDs and is weighted to represent the national estimates. Results: Of all the ED visits for UTI, 72% were accounted by females, which remained consistent from 2010 to 2014. The rate of UTI related ED visits increased by 1.7% (p-value <0.001) from 3545 in 2010 to 3605 in 2014 per 100,000 people. Meanwhile, ED cases increased by 15.6% from 2010 to 2014 for elderly  $\geq 65$  years. In addition, the mean cost of ED visits with a primary UTI diagnosis increased 50.8% (p-value <0.0001) from \$2391 in 2010 to \$3606 in 2014. Finally, the percentage of the individuals admitted to the same hospital from the ED with a primary UTI diagnosis decreased from 42 to 33% (p-value <0.001) from 2010 to 2014.

Conclusion: There is a continued increase of ED visits for UTI and associated costs from 2010 to 2014, and there was a decrease of in-patient admission through the ED for UTI as the primary diagnosis.

ADMINISTRATION AND ANALYSIS OF THE VR-12 PATIENT-REPORTED OUTCOME MEASURE IN A HOSPITAL SETTING. **S. Mishra**. Tucson. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: Banner-University Medical Center - Michael Dohm, MD.

This internship was an exercise in managing, investigating and analyzing the utilization of patient-reported outcome measures (PROMs) as a means of quality improvement application in knee and hip replacements in a hospital setting. Outcome measures are a central pillar of the evidence-based practice movement and critical to evaluating the health care system and understanding best practice. Replacement of the knee and hip are a commonly performed medical procedure with over one million performed in the United States each year, and thus an important field to be certain optimal outcomes are achieved. The VR-12 was the selected PROM due to its vast usage and ease of administration. Twenty patients were surveyed between January 1, 2017 and September 1, 2017. Each patient answered the survey questionnaire twice, one immediately before surgery and another six months later. The pain and general health question was a five-point Likert scale-based question. The Wilcoxon Signed-Rank test was used to analyze the questions. Results of the Wilcoxon-Signed Rank test for the general health variable showed no statistical significance ( $p=0.42$ ). However, a statistically significant reduction in pain ( $p=0.001$ ). Six patients were lost to follow-up and were unable to be reached by telephone or email, so the final sample size was 14. Hospital-based use of PROMs will be effective if full-time staff are engaged to consistently follow-up with patients and to aggregate data. Administering the PROM right before surgery requires diligent awareness on the part of the administrator and ideally should be performed baseline prior to intervention and at the patient's last outpatient visit. Increased physician buy-in will help promote and improve follow-up rates. Patients can understand their role in advancing medical science.

**Phoenix Only**

**Session VI:**

**1:20 – 5:00**

*Phoenix Building 2, Room 2309*

**Abstracts**

INVASIVE GROUP A STREPTOCOCCUS (IGAS) IN ARIZONA. **D. Ranshaw.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Arizona Department of Health Services (AZDHS) Office of Infectious Disease Services (OIDS) - Kenneth Komatsu, MPH and Rachana Bhattarai, BVSc&AH, MS, CIC.

Introduction: Cases of invasive Group A Streptococcus (iGAS) have been recorded in Arizona since 1993 and in 2006, it appeared that the total number of cases were beginning to decrease. However, since 2009 there has been a steady increase in cases and 2016 saw a steady number of cases throughout the year, contradicting the usual cyclic trend. This report aims to provide further analysis of the iGAS cases reported from 2014 to 2017 and compare it to the previous data collected by ADHS. Methods: Individuals that met the case definition for iGAS, and were electronically reported to MEDSIS, were identified for the period 2014 to 2017. Case demographics, clinical severity, comorbidities, and risk factors were collected through chart review. Basic descriptive statistics were calculated. Results: 1,493 cases of iGAS were identified and a random sample of 80 de-identified medical records were requested and reviewed. Primary bacteremia and/or cellulitis was identified in 44% of cases. The most common comorbidities identified were diabetes (26%) and alcohol abuse (20%). Other prevalent risk factors also included history of smoking (39%). Conclusion: The burden of iGAS in Arizona remains substantial. Enhanced surveillance and further research would be beneficial and could have a considerable public health impact.

SERVING THE COMMUNITY AND ENHANCING PROFESSIONAL DEVELOPMENT—  
THE IMPACT OF INTERNS ON A SUMMER FOOD SERVICE PROGRAM. **H. Putnam.**  
Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site  
and Preceptor: Maricopa County WIC - Jennifer Dykhuizen, MPH.

**INTRODUCTION:** The United States Department of Agriculture (USDA) funds Summer Food Service Programs (SFSP) to bridge the nutritional gap created over the summer months for children who typically receive breakfast and lunch at school. Funding is provided to qualified sponsor organizations who may choose to distribute the meals themselves or partner with another organization for distribution. St. Mary's Foodbank was the sponsor for the "Summer Meals" program and WIC clinics served as distribution centers due to their strategic locations in Maricopa County. A need for an SFSP in Arizona is evident as the state ranks among the top five in the U.S. for food insecure children. **METHODS:** Most SFSPs have a singular goal of decreasing food insecurity in their community. However, Summer Meals had three core objectives: decrease food insecurity, create a better-prepared public health workforce through the use of interns, and lessen the burden the SFSP placed on WIC clinic staff. Previously, the Summer Meals program utilized interns to assist in carrying out program needs but 2017 marked the first year that interns were used at every level of program implementation. As the Summer Meals Coordinator, I developed my program management, evaluation, and communication skills while supporting the professional development of my undergraduate colleagues and the growth of Maricopa County WIC's SFSP. **RESULTS:** This program succeeded in serving nearly 15,000 meals, enhancing intern's competence across several essential public health services, and limiting the additional work imposed on WIC clinic staff. **CONCLUSION:** A review of the literature reveals that this approach to SFSPs is novel and could have wide applicability during a time when public health programs are not well-funded and practitioners must be thrifty with their resources.

EVALUATING EXPOSURE REGISTRIES FOR COMMUNITY MEMBERS AND FIRST RESPONDERS FOR LARGE-SCALE CHEMICAL EXPOSURES. **A. McEowen.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa County Department of Public Health - William Smith, MS.

Background Exposure registries are used to track the health effects of those exposed to a particular hazard. This program evaluation assesses the strength and weaknesses of registries for residents and first responders in the event of a large-scale chemical exposure. Methods Current registry tools were first assessed; the primary tools of interest here are the Assessment of Chemical Exposures (ACE) and the Emergency Responder Health Monitoring and Surveillance (ERHMS). The ACE survey was modified to fit a mock exposure scenario and distributed to employees at the Maricopa County Department of Public Health (MCDPH). The resulting data was analyzed via SAS and a data analysis plan was created for future use. Results Readability, user-friendliness, and specificity were among the main areas of concern for the ACE and ERHMS surveys. A participation rate of 34% resulted from the pilot ACE distribution. Although the results were not significant ( $p$ -value = .7), data indicated that those who responded to the mock exposure survey who fell into the high exposure group were more likely to experience respiratory symptoms. Conclusions Future directions of this project should apply this cycle of evaluation to other aspects of emergency preparedness and environmental health.



ARIZONA SCHOOLS: BEYOND EDUCATION - A SURVEY OF DISTRICTS OFFERING SERVICES AND PROGRAMMING OUTSIDE THE TRADITIONAL SCOPE OF EDUCATION, AND THE SUBSEQUENT IMPLICATIONS RELATED TO HEALTH. **K. Suarez.** Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Vitalyst Health Foundation - Suzanne Pfister, MPA.

**Background** - For many communities, schools act as a centralized hub where services and information for students and non-students can be easily accessed. Public schools have begun adopting more comprehensive programs and services as their communities request them. This formalized public school model, called a Community School, has been implemented as a way for public schools to meet the health and education needs, and improve outcomes, of their students and the community. **Methods** - A survey was developed by Vitalyst Health Foundation and was disseminated via email to school Superintendents. The results of the survey were analyzed in order to gauge the type and frequency of services made available to both students and community members. **Results** - 230 Superintendents received an email with the survey. There were 102 survey responses submitted, 56 of which were deemed acceptable for analysis. The survey showed that 59% of districts reported none of their schools offer school based health care clinics while another 14% said that all of their schools offer health clinics. Additionally, 33% of districts reported that all of their schools offer mental and behavioral health services while another 24% reported that no schools within their district offer such services. The remaining survey categories showed varying mix of responses. **Conclusion** - The survey showed that most public schools are offering additional programs and services to students and community members similar to those in Community School models.

INVESTIGATION AND MANAGEMENT OF SELECT ZOO NOTIC DISEASES IN MARICOPA COUNTY. **S. Tarrant**. Phoenix. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa County Department of Public Health - Craig Levy, MS.

Background: Zoonotic diseases contribute a significant burden to human health worldwide. Successful management requires understanding the epidemiology of disease in the animal reservoir and investigating outbreaks of potential significance. In Maricopa County in 2016-2017 there was an atypical outbreak of canine leptospirosis, an unusual zoonotic disease in this county. Methods: This internship occurred at the Maricopa County Department of Public Health. It involved routine activities related to the management of zoonotic diseases including tasks such as rabies risk assessments. The outbreak of canine leptospirosis was investigated by analysis of canine medical records submitted to MCDPH. Results: 67 cases of canine leptospirosis were reported prior to conclusion of the internship. 20 cases had a severe outcome requiring hospitalization or resulting in death or euthanasia (3 cases). There was no association between age or gender and severity of outcome. Cases for which medical records were available demonstrated a range of clinical signs; three signs had significant association with outcome. Vomiting dogs had an odds ratio of 8.3 (95% CI (2.2, 31.3), p-value 0.002) of having a severe outcome, and dogs with diarrhea demonstrated OR of 6.8 (95% CI (1.9, 24.6), p-value 0.004) for severe outcome. Cases presenting with conjunctivitis had an OR of 0.1 (95% CI (0.01, 0.87), p-value 0.037). Discussion: This outbreak of canine leptospirosis provided a unique opportunity for investigating the disease. Local health departments are responsible for protecting the health of their residents through outbreak investigations, improving communication, and management of diseases. This internship assisted with these tasks as related to select zoonotic diseases.

**PROGRAM EVALUATION OF BLOOM365'S BLOOM IT UP CURRICULUM. D.**

**Lambert.** Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Bloom365 - Donna Bartos, BA, MPA.

**INTRODUCTION:** The nonprofit organization Bloom365 seeks to address the issue of intimate partner violence by targeting students in Arizona middle schools and high schools to prevent abuse before it starts. Their Bloom It Up program consists of a 7-session curriculum focused on red flags, root causes of abuse, self-esteem, and help-seeking behavior. **METHODS:** A program evaluation was conducted at North High School in order to determine if the curriculum had the intended impact. A pre-/post-questionnaire was created to measure the change in understanding and beliefs after going through the Bloom It Up curriculum. The questionnaire was delivered once before starting the curriculum and then again after completing the 7 sessions. The mean scores of the questionnaires were used to conduct a paired t-test analysis. The paired t-test allows for the determination of a statistically significant change between the scores of the pre-questionnaire and the post-questionnaire. **RESULTS:** Over 600 surveys were collected at North High School. The results are still being tabulated using the mean and standard deviation of the survey scores. Preliminary results show that post-survey scores increased compared to pre-survey scores. **CONCLUSION:** Addressing intimate partner violence with adolescents and teenagers while encouraging healthy relationships could be a crucial step in preventing the cycle of violence prevalent in our society. This program evaluation offers insight for Bloom365 and can be used to improve upon their program and ensure they are achieving their desired outcomes.

COMMUNITY COLLABORATIVE WELLNESS PROGRAM. **C. Boudreau**. Phoenix. MPH Internship Committee Chair: E. Gonzalez, PhD. Site and Preceptor: ASU's Community Collaborative at the Westward Ho - Tama Reily.

The purpose of this internship was to develop a replicable six-week wellness program for the residents at the Westward Ho Apartments, in downtown Phoenix, Arizona. Westward Ho is a Section 8, independent living housing complex that provides residency to predominantly elderly, disabled, and low-income individuals. Research has shown a clear trend in the relationship of income and health status: the lower your income, the poorer your health status. To promote wellness for these high-risk individuals, ASU's Community Collaborative offers supportive services to the residents, including psychosocial, recreation, nursing, and nutrition services. To support the efforts of the Collaborative, this internship sought to develop six PowerPoint presentations with written dialog on the following: Introduction to Wellness, Chronic Illness, Obesity and Nutrition, Emotional Wellness, Mental Health, and Financial Health. Additionally, a wellness manual, supplementary activities, and an end of course evaluation was developed. Based off a 2013 needs assessment of the residents, curriculum content and learning objectives were identified, research and information were gathered, curriculum content was developed, and content material was reviewed. Throughout this internship, there was the constant challenge of adequately providing the correct level of complexity and detail to the material covered. While greater depth has its advantages for higher functioning residents, too much information could overwhelm residents who have cognitive challenges. Overall, however, the developed wellness program serves as a solid foundation to provide residents with a basic overview of how various intersections can impact health and ultimately promotes health in an underrepresented and high needs population.

CAREER CHARACTERISTICS AND PUBLIC HEALTH IMPRESSIONS BETWEEN MD AND MD-MPH GRADUATES AND CURRENT STUDENTS. **R. Mohty**. Phoenix. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: University of Arizona College of Medicine - Phoenix - Moe Bell MD MPH.

INTRODUCTION: U.S. medical schools offer many joint degrees in addition to Doctor of Medicine (MD) training—including Master of Public Health (MPH) joint programs. Over 60% of medical schools now offer MD-MPH programs compared to only 25% two decades ago. Few studies have evaluated characteristics between MD and MD-MPH trainees. Data investigating possible differences may provide insight into medical-public health education. METHODS: This study was conducted at the University of Arizona College of Medicine-Phoenix which offers MD and MD-MPH tracks. Two surveys were created, one targeting the current student body and the other, former graduates. Surveys measured MPH impressions and value, and future training. RESULTS: There were 95 responders among graduates—17 of those were MD-MPH trained. Of those non-MPH trained, 39% were practicing in primary care specialties. Of the MD-MPH graduates, 59% were in primary care. Of the 78 non-MPH trained, 8 indicated that they may acquire an MPH in the future, 4 indicated that they acquired an MPH after medical school, and 66 indicated no intention to pursue an MPH. Additional data was acquired regarding MPH impressions; the greatest reaction, at 84% of non-MPH trained responders, was that an MPH confers significant population health awareness. MPH “value” was assessed on a 1-to-10 scale: MD average of 5.5 versus MD-MPH average of 7.4. The student body survey is still pending. CONCLUSION: Among graduates, there appears to be a significant difference between MD and MD-MPH in terms of primary care preference. Important similarities exist between the two groups, especially the overall value of an MPH as well as subjective implications of public health training. These insights might enlighten future medical and public health collaboration at the trainee level.

IMPROVING FRAGILITY FRACTURE FOLLOW-UP AND EDUCATION: A QUALITY IMPROVEMENT PROJECT. **J. Lendrum**. Phoenix. MPH Internship Committee Chair: M. Bell, MD. Site and Preceptor: Banner University Medical Center - Phoenix - Clifford Jones, MD.

INTRODUCTION: Osteoporosis and osteopenia are major public health problems and contribute a large portion to the fracture burden in the United States, however few patients receive adequate bone health to help prevent future fractures despite the “Own the Bone” campaign. The purpose of this project is to determine the current process for patients to follow up with bone health after a fragility fracture at a major level-1 trauma hospital and apply quality improvement to help increase follow up rates and patient education. METHODS: This study was conducted at Banner University Medical Center – Phoenix (BUMCP). Providers working with the bone health program, including orthopaedic surgeons and residents, rheumatologists, nursing liaisons, and nurse practitioners, were surveyed regarding the current practice and areas for improvement. SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was then performed to identify areas for improvement. RESULTS: We found that patients are often placed on the appropriate vitamin D and calcium supplementation and patients have a good understanding that their underlying bone quality contributed to their fragility fracture. Website referral or direct patient education were the best education avenues, and lack of understanding of bone health importance and convenience were rated the primary reasons for lack of follow up. Full results are pending. DISCUSSION: Overall, the current program has the proper criteria for recruiting patients and has good multidisciplinary communication, however there are several areas the program could improve upon to increase follow up rates, most notably increasing education on the importance of bone health. Website referrals or an app for patients to refer to were rated as the best possible interventions.

RACIAL & ETHNIC DISPARITIES FOR CERVICAL CANCER IN ARIZONA: A REVIEW OF THEMES, RESOURCES AND POLICY RECOMMENDATIONS. **T. Pitt.** Phoenix. MPH Internship Committee Chair: M. Bell, MD. Site and Preceptor: University of Arizona College of Medicine Phoenix - Laura Mercer, MD.

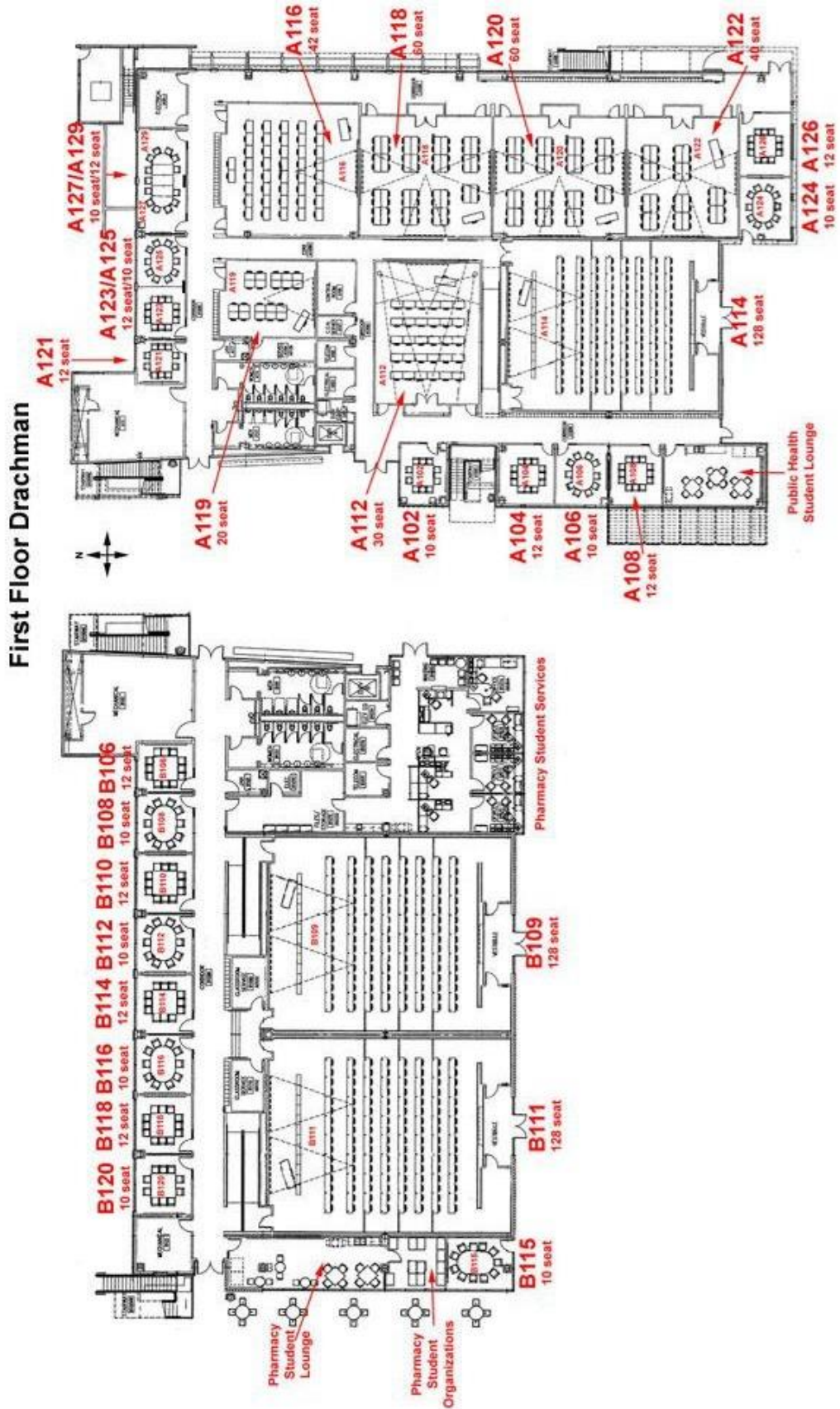
**INTRODUCTION:** With the introduction of vaccination and screening, the incidence of cervical cancer has decreased dramatically and is now largely considered to be preventable. Despite the advances, there exist racial and ethnic disparities in both incidence and mortality for invasive cervical cancer on a national and state level. In Arizona, disparities for invasive cervical cancer for Hispanics persist in case counts and are widening for mortality. The objective of this study was twofold: to identify causes of the mortality disparity identified in Arizona and to provide solutions for minority disparities in cervical cancer incidence and mortality. The study addresses several core functions and essential services of public health focusing on assessment and policy development. **METHODS:** A literature review was completed prior to the qualitative study. The study was conducted at the University of Arizona College of Medicine Phoenix. Either phone or in-person interviews were conducted using 4 open-ended questions leading to discussion focusing on reasoning, themes, recommendations, and available resources. **RESULTS:** We anticipate identifying underlying themes contributing to the disparity possibly including healthcare access, cultural norms and expectations, and border health, among others, resulting in advanced presentation and increased mortality. We plan to publish and distribute a community brief with the resources identified. **CONCLUSION:** In conclusion, there exist underlying themes causing the cervical cancer mortality disparity among Hispanic women in Arizona. Identifying these themes can inform future policy recommendations to combat this healthcare disparity.

A COMPARISON OF VIDEO EDUCATION VERSUS WRITTEN PAMPHLET IN ENCOURAGING OPIOID ABUSERS TO FILL PRESCRIPTIONS FOR TAKE HOME NALOXONE. **A. Thomas.** Phoenix. MPH Internship Committee Chair: M. Bell, MD. Site and Preceptor: Maricopa Integrated Health System - Kara Geren MD, MPH.

Introduction: The U.S. Department of Health and Human Services (HHS) declared the opioid crisis a public health emergency in 2016.<sup>1</sup> The emergency department (ED) experienced a 30% increase in visits for opioid overdose, making it a great place to intervene with opioid overdose education and naloxone distribution (OEND) programs.<sup>2,3</sup> Our goal is to start an OEND at Maricopa Integrated Health System (MIHS), the first of its kind in Arizona. The aim of this study is to compare the effectiveness of video education versus a written pamphlet on naloxone prescription fill rate. We are also checking for use of naloxone as a secondary objective. Method: This is an ongoing prospective, randomized two-arm pilot study consisting of 45 subjects. Patients are enrolled and consented while in the ED at MIHS, then randomized to either the video or pamphlet group. Afterwards, they are given a prescription for an intramuscular naloxone kit free of charge. All patients who fill their prescription are called at 3 months. Results: Out of the 45 patients, 25 were randomized to the video group and 20 to the pamphlet group. In the video group, 36% (9/25) patients filled their prescription compared to only 20% (4/20) in the pamphlet group (odds ratio and 95% CI: 2.25 [0.57,8.82]). So far only 4 participants were contacted for 3-month follow-up, and none had used their prescription. Discussion: The preliminary data suggests that the video education may be more effective in motivating patients to fill their prescription for naloxone compared to the pamphlet method. There has not been any reported use of naloxone to date, but only a small number of participants have been contacted. Future Aims: We will continue to enroll patients and collect data, and hopefully have a better idea of the utility of prescribing naloxone kits in Maricopa County.



# Drachman Hall Map



## **The MPH Internship Experience**

From the inception of the Master of Public Health Program in 1993, the culminating experience of the program's curriculum has been the internship. In the fall of 1999, MPH faculty determined that students needed a formal setting for making their oral presentations. A committee comprised of faculty, students, and student services professionals was formed to develop an appropriate presentation venue. In November 1999, the MPH Program debuted its first MPH Internship Conference. The format of the conference, held each fall and spring, is similar to that of a professional or scientific meeting.

Since its establishment, the MPH Internship Conference has grown in stature and significance to the Mel and Enid Zuckerman College of Public Health (MEZCOPH). The College uses this event as a public health networking tool by inviting public health practitioners, partners, and alumni throughout the state. The key to its success lies in the student participation. The MPH Internship Conference is a student-run production. Students coordinate the multitude of details involved in its planning, promotion, and culmination; student presentations are its foundation.

Through contributions they have made and the benefits they have gained, the Internship Conference reflects the indelible handprint of MEZCOPH students on public health projects and agencies throughout the world.





THE UNIVERSITY OF ARIZONA

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