



THE UNIVERSITY OF ARIZONA

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

**Fall 2017
MPH Internship Conference**

**Friday, November 17, 2017
12:00pm – 5:00pm**

**Drachman Hall
Phoenix Biomedical Campus**

Mel and Enid Zuckerman College of Public Health

One Health: An Interdisciplinary Approach to Research

Keynote Speakers:

Heidi E. Brown, PhD, MPH

Dr. Heidi Brown has a research focus on the epidemiology and control of vector-borne and zoonotic diseases. Her goal is to identify human disease risk by modeling vector, host and pathogen distributions. The complex nature of the systems she works on diseases requires her to blend field collecting, ecological assessment, laboratory experiments, epidemiological analysis, spatial statistics, remote sensing, geographic information systems, and computer-based modeling in order to develop a more comprehensive view of disease dynamics. Current research areas include: West Nile virus, dengue, canine heartworm, valley fever, spatial epidemiology, and climate change. Teaching areas include undergraduate Epidemiology and Biostatistics and a graduate level spatial epidemiology course. Current projects involve researchers in the UA Department of Geography and Engineering to investigate spatial uncertainty and methods to optimally visualize risk. Through collaborations at the CDC, she is working to develop a model to test trapping effectiveness for *Aedes aegypti*, the primary dengue vector. This latter project involves both experiments to test vector flight ranges as well as mathematical models of vector abundance and involves experts in the UA Math and Entomology departments. Finally, she is continuing to quantify the association between climate change and health.

Katherine (Kate) Ellington, PhD

Katherine (Kate) Ellington, PhD, joined the College of Public Health in 2017 following 10 years of public service as a healthcare epidemiologist at the Centers for Disease Control and Prevention (CDC) and the Oregon State Health Department. While at CDC, she investigated the transmission of multidrug-resistant organisms in healthcare settings, evaluated initiatives to prevent healthcare-associated infections, built capacity for infection prevention in resource-limited settings, and served as the agency's subject matter expert for hand hygiene in healthcare. At the Oregon Health Department, she directed the state's mandatory healthcare-associated infection reporting program, investigated infectious disease outbreaks and led injection safety promotion efforts.

Kristen Pogreba-Brown, PhD, MPH

Kristen Pogreba-Brown, PhD, MPH, is an assistant professor of epidemiology at the University of Arizona Mel and Enid Zuckerman College of Public Health. Prior to joining the faculty, Dr. Pogreba-Brown was an Epidemiologist with the College as the director of the Student Aid for Field Epidemiology Response (SAFER) team. In addition to continuing to oversee the SAFER program, her research projects are focused on foodborne diseases and improving methodology to respond to outbreak investigations. She is currently working on a project to identify the risk factors related to foodborne infection as well as the risk factors related to specific chronic outcomes following acute disease. She has recently initiated a One Health Program at the University to form collaborative research teams from across campus and develop a graduate level certificate program. She is also actively involved in public health preparedness activities, specifically for large events. Dr. Pogreba-Brown works with various county health departments in Arizona as well as the state health department to aid in outbreak investigations and serves on the state's Foodborne Taskforce Committee.

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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

The keynote speakers for sharing their experience and knowledge

Internship Conference Volunteers

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

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

**Fall 2017
MPH Internship Conference**

November 17, 2017

Conference Planning Committee

Co-Chairs:

Vanessa Moore | Derek Liu

Committee Members:

David Campas | Beau Finan | Camille Gonzalez | Sana Khan
Andrea Martinez | Nafisah Paige | Katey Redmond | Arianna Resendiz
Teresa Sosa | Dora Valencia

Office of Student Services and Alumni Affairs:

Tanya Nemec
Ryley Tegler
Kim Barnes
Chris Tisch, Assistant Dean

Schedule of Events

- 11:30a-12:00p** Registration
(**Drachman Hall, A114 / Phoenix Biomedical Campus, Building 2, Room 2306**)
- 12:00p-12:05p** Welcome
Co-Chairs: Vanessa Moore and Derek Liu
(**Drachman Hall, A114 / Phoenix Biomedical Campus, Building 2, Room 2306**)
- 12:05p-1:00p** Keynote Speakers
(**Drachman Hall, A114 / Phoenix Biomedical Campus, Building 2, Room 2306**)
- 1:20p-5:00p** Internship Presentations (**Tucson-Drachman Hall A; Phoenix-Biomedical Campus Building 2**)
- Session I:** Drachman Hall, Room A122
- Session II:** Drachman Hall, Room A118
- Session III:** Drachman Hall, Room A120
- Session IV:** Drachman Hall, Room A116
Phoenix Building 2, Room 2306
- Session V:** Phoenix Building 2, Room 2309
- 5:00p-6:00p:** Reception
(**Walkway of Wellness, Tucson**)

Presenters

Name	Concentration*	Room**	Time	Page
Andre Alarcon	HSA	A116 / Phx 2306	1:40 PM	51
Samantha Balland	EOH	A122	1:20 PM	22
Emily Began	EOH	A122	1:40 PM	23
Corinna Brower	HBHP	A120	2:40 PM	45
Kelsey Brown	HSA	A116 / Phx 2306	3:40 PM	57
Dametreea Carr	One Health	A118	3:40 PM	39
Lauren Crow	MD/MPH	Phx 2309	1:20 PM	62
Desiree Davis	HBHP	A120	3:40 PM	48
Bianca Demara	PHPM	A116 / Phx 2306	3:00 PM	55
Carrie Foster	EOH IH	A122	2:00 PM	24
Sara Frye	HSA	A116 / Phx 2306	2:00 PM	52
Taylor Grogg	HSA	A116 / Phx 2306	2:20 PM	53
Alma Hernandez	HSA	A116 / Phx 2306	1:20 PM	50
Danielle Hutchens	EPI	A118	2:40 PM	36
Kyla James	FHC MCH	A120	1:40 PM	42
Graciela Jauregui	PHPM/MAS	A120	3:00 PM	46
Komang Kartinawati	PHP	Phx 2309	1:40 PM	63
Derek Koller	EOH IH	A122	2:20 PM	25
Moises Luna	EPI	A118	3:20 PM	38
Chan Lwin	HSA	A116 / Phx 2306	4:00 PM	58
Ashleigh Madden	EPI	A118	2:20 PM	35
Pateel Margossian	EPI	A118	3:00 PM	37
Linnette Mayate	FHC MCH	A120	2:00 PM	43
Abigail Peng	EOH IH AMP	A122	2:40 PM	26
Ashley Pickering	MD/MPH	A120	3:20 PM	47
Michelle (Arianna) Price	PHPM	A122	4:00 PM	30

Presenters (Cont.)

Name	Concentration*	Room**	Time	Page
Adriana Reynolds	EOH	A122	3:00 PM	27
Aislinn Rookwood	EOH	A122	3:20 PM	28
Elena Sheveleva	EPI	A118	1:40 PM	33
Elizabeth Smith	HSA	A116 / Phx 2306	2:40 PM	54
Ruben Soliz	PHPM	A122	3:40 PM	29
Mitchell Thomae	HSA	A116 / Phx 2306	3:20 PM	56
Carmen Tirdea	HSA	A116 / Phx 2306	4:20 PM	59
Mario Trejo	EPI	A118	2:00 PM	34
Juanita Trejo	HBHP	A120	1:20 PM	41
Angela Urbon-Bonine	FCH MCH	A120	2:20 PM	44
Nickolas Vamianakis	HSA	A116 / Phx 2306	4:40 PM	60
Lily Weinberg	EPI	A118	1:20 PM	32

*Concentrations and Dual Degree Designations

AMP – Accelerated Master’s Program

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.

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Lily Weinberg	<i>lweinberg@email.arizona.edu</i>

Presenters Schedule

Time	Session I Room A122	Session II Room A118	Session III Room A120	Session IV Room A116/ Phx 2306
1:20	S. Balland	L. Weinberg	J. Trejo	A. Hernandez
1:40	E. Began	E. Sheveleva	K. James	A. Alarcon
2:00	C. Foster	M. Trejo	L. Mayate	S. Frye
2:20	D. Koller	A. Madden	A. Urbon-Bonine	T. Grogg
2:40	A. Peng	D. Hutchens	C. Brower	E. Smith
3:00	A. Reynolds	P. Margossian	G. Jauregui	B. Demara
3:20	A. Rookwood	M. Luna	A. Pickering	M. Thomae (PHX)
3:40	R. Soliz	D. Carr	D. Davis	K. Brown (PHX)
4:00	M. Price			C. Lwin (PHX)
4:20				C. Tirdea (PHX)
4:40				N. Vamianakis (PHX)

Phoenix Only

Time	Session V Room 2309 (PHX)
1:20	L. Crow
1:40	K. Kartinawati

Session I – Environment and Health Policy
(Drachman Hall, Room A122)

- 1:20 APPLICATION OF SAFETY AND INDUSTRIAL HYGIENE METHODS AT NORTH AMERICAS LARGEST COPPER PRODUCING MINE. **S. Balland.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Freeport-McMoRan - Chinenye Ifeanyi-Ileka, MS.
- 1:40 INCIDENT MANAGEMENT SYSTEM & RISK MATRIX ANALYSIS AT FREEPORT-MCMORAN NORTH AMERICAN SITES. **E. Began.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Freeport-McMoRan Phoenix Corporate Office - Vicki Seppela.
- 2:00 TOWN OF ORO VALLEY SAFETY MANAGEMENT INTERNSHIP. **C. Foster.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Town of Oro Valley Safety Management Department - Char Ackerman, MPA.
- 2:20 INDUSTRIAL HYGIENE INTERNSHIP AT TERRACON CONSULTANTS, INC. **D. Koller.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin PhD CIH. Site and Preceptor: Terracon Consulting Engineers and Scientists - Michael Crandall, MS, BS, CIH, LEED AP.
- 2:40 APPLICATION OF HEALTH, SAFETY, ENVIRONMENT, AND FACILITIES AT AN AEROSPACE MANUFACTURING SITE. **A. Peng.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Honeywell Aerospace - James Tucker MTech CIH CSP.

- 3:00 LEADING KING COUNTY IN THE RIGHT DIRECTION: IMPROVING THE POLICY, INTERNAL COLLABORATION & COMMUNITY ENGAGEMENT STRATEGIES FOR ADDRESSING LEAD EXPOSURE. **A. Reynolds.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Kelly Reynolds, MSPH, PhD. Site and Preceptor: King County Department of Public Health - Kirsten Wyses, MHSA.
- 3:20 ENVIRONMENTAL HEALTH COMMUNITY ASSESSMENT IN BATEY COMMUNITIES OF THE DOMINICAN REPUBLIC. **A. Rookwood.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: International Health Organization of Phoenix (IHOP) - Dawn Barcellona, MD.
- 3:40 STATE MEDICAID REFORM: IMPLICATIONS FOR ARIZONA AND THE STATE-FEDERAL MEDICAID PARTNERSHIP. **R. Soliz.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Daniel Derksen, MD. Site and Preceptor: Arizona Health Care Cost Containment System (AHCCCS) - Elizabeth Lorenz, JD.
- 4:00 MODIFYING RECRUITMENT EFFORTS, INCREASING STUDENT KNOWLEDGE OF HEALTH INSURANCE, AND CREATING TARGETED LEARNING OBJECTIVES WITH PROJECT SHARE. **M. Price.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Daniel Derksen, MD. Site and Preceptor: Arizona Center for Rural Health - Alyssa Padilla, MPH.

Session II – Epidemiological Approaches to Public Health
(Drachman Hall, Room A118)

- 1:20 **INVASIVE MENINGOCOCCAL DISEASE AMONG CALIFORNIA COLLEGE STUDENTS, JANUARY 2011 TO JULY 2017. L. Weinberg.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Yann Klimentidis, PhD, MS. Site and Preceptor: California Department of Public Health - Jennifer Zipprich, PhD.
- 1:40 **OPTIMIZING EARLY MOTOR PD STUDIES: FROM DATA INVENTORY TO LONGITUDINAL MODEL. E. Sheveleva.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Zhao Chen, PhD, MPH. Site and Preceptor: Critical Path Institute - Klaus Romero, MD, MS, FCP.
- 2:00 **EFFECTS OF HIV STATUS ON RESPONSE TO TREATMENT FOR NON-METASTATIC CERVICAL CANCER PATIENTS IN LUSAKA, ZAMBIA. M. Trejo.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Robin Harris, PhD, MPH. Site and Preceptor: Cancer Diseases Hospital, Lusaka, Zambia - Amr Soliman, MD, PhD.
- 2:20 **DETERMINING THE EFFECT OF BREAST DENSITY AND PHYSICAL ACTIVITY ON BREAST CANCER RISK. A. Madden.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Robin Harris, PhD, MPH. Site and Preceptor: Northwestern University- Department of Preventative Medicine - Elizabeth Hibler, MPH, PhD.
- 2:40 **AZ RURAL WOMEN'S HEALTH NETWORK DEVELOPMENT SURVEY. D. Hutchens.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Eyal Shahar, MD, MPH. Site and Preceptor: Arizona Rural Women's Health Network - Leah Meyers, MSW.

- 3:00 OPERATING ROOM PERFORMANCE IMPROVEMENT PROJECT. **P. Margossian.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Robin Harris, PhD, MPH. Site and Preceptor: Carondelet St. Mary's Hospital - Sue Gold MSN RN.
- 3:20 INTEGRATING ANIMALS IN ELDERLY CARE RESIDENTIAL FACILITIES. **M. Luna.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Elizabeth Jacobs, PhD. Site and Preceptors: Las Haciendas on the River - Dr. Dieter Steklis and Netzin Steklis.
- 3:40 EVALUATION OF ZIKA CAMPAIGN ADVERTISEMENTS AND EFFECTIVE MESSAGING AMONG PUBLIC HEALTH PROFESSIONALS AND THE GENERAL PUBLIC. **D. Carr.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Kristen Pogreba-Brown, PhD, MPH. Site and Preceptor: Arizona Department of Health Services - Joli Weiss, PhD.

Session III – Addressing Barriers to Health Access
(Drachman Hall, Room A120)

- 1:20 DEVELOPMENT AND IMPLEMENTATION OF A DATABASE FOR THE NATIONAL ALLIANCE ON MENTAL ILLNESS (NAMI) OF SOUTHERN ARIZONA. **J. Trejo.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Nicole Yuan, PhD, MPH. Site and Preceptor: NAMI of Southern Arizona - Bernadette Grandinetti.
- 1:40 CREATING A HEALTHY TOMORROW: MINDFULNESS FOR CHILDREN. **K. James.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Burris Duncan, MD. Site and Preceptor: El Rio Health - Shelley Whitlach, MS.
- 2:00 BULLYING AMONG COLLEGE STUDENTS. **L. Mayate.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Velia Leybas Nuño, PhD, MSW. Site and Preceptor: Disability Resource Center (DRC) - Sue Kroeger; Ed.D.
- 2:20 EVALUATION OF TUCSON MEDICAL CENTER'S OUTPATIENT BREASTFEEDING SUPPORT CLINIC. **A. Urbon-Bonine.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Christina Cutshaw, PhD. Site and Preceptor: Tucson Medical Center - Noreen Carver, RN, IBCLC.
- 2:40 ARIZONA COLLEGE PREP ACADEMY SCHOOL HEALTH INDEX ASSESSMENT AND INTERVENTION. **C. Brower.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Cynthia Thomson, PhD, RD. Site and Preceptor: Arizona College Prep Academy - Charlene Mendoza, M.Ed.

- 3:00 A GAP ANALYSIS BETWEEN THE U.S. JUSTICE SYSTEM AND THE MEXICAN HEALTHCARE SYSTEM THROUGH BINATIONAL TUBERCULOSIS COLLABORATIONS. **G. Jauregui.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Maia Ingram, MPH. Site and Preceptor: Arizona Department of Health Services, Office of Border Health - Robert Guerrero, MBA.
- 3:20 COMMUNITY PERCEPTIONS OF BARRIERS TO EMERGENCY CARE UTILIZATION IN RURAL UGANDA. **A. Pickering.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Hal Strich, MPH. Site and Preceptor: Global Emergency Care - Bradley Dreifuss, MD.
- 3:40 DEVELOPING A PROGRAM PLAN FOR A DISPENSARY OUTREACH PILOT PROGRAM. **D. Davis.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Douglas Taren, PhD. Site and Preceptor: Pohnpei State Department of Health Services - Dr. Brian P. Mangum PhD, MSc, FRSPH, FRAI, IPFPH.

Session IV – Strengthening Health Services

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

- 1:20 VOTING TREND ANALYSIS ON HEALTH CARE POLICY AMONG ARIZONA STATE LEGISLATORS. **A. Hernandez.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Cecilia Rosales, MD, MS. Site and Preceptor: University of Arizona Mel Enid Zuckerman College of Public, Division of Public Health Practice and Transitional Research – Daniel Hernandez, Jr., B.A.
- 1:40 QUALITY IMPROVEMENT PROCESS FOR THE CLINICAL AND TRANSLATIONAL RESEARCH CENTER AT U OF A: IDENTIFYING AND REDUCING BARRIERS TO INCREASE VOLUME. **A. Alarcon.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: The University of Arizona Clinical and Translation Science Research Center - Maria Gordon, MS.
- 2:00 EVALUATION & DEVELOPMENT OF MARKETING STRATEGY FOR THE ARIZONA ONCOLOGY FOUNDATION. **S. Frye.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Arizona Oncology Foundation - Becky O'Hara, B.S.
- 2:20 IMPROVING EMPLOYEE COMPLIANCE THROUGH CALL-MONITORING PROCESS INITIATIVES. **T. Grogg.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Arizona Smokers' Helpline - Uma Nair, PhD.
- 2:40 REVIEW ON END OF LIFE CARE PREFERENCES FOR VETERANS DIAGNOSED WITH CANCER IN SOUTHERN ARIZONA. **E. Smith.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Southern Arizona Veterans Affairs Health Care System - Maria Bishop, MD, FACP, BSN.

- 3:00 ONE IN SIXTY-EIGHT: EXPLORING THE DISPARITIES AND GAPS IN AUTISM-RELATED HEALTH SERVICES IN YUMA COUNTY. **B. Demara.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Leila Barraza, JD, MPH. Site and Preceptor: Regional Center for Border Health, Inc. - Amanda Aguirre, RD.
- 3:20 5-YEAR FINANCIAL PROJECTION FOR THE JUNTOS POR LA SALUD MOBILE HEALTH CLINIC. **M. Thomae.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: UACOM - Phoenix, Juntos Por La Salud Mobile Health Unit - Matt Eckhoff, MPH.
- 3:40 TRANSITION FROM VSIMS TO DAVE • A DEATH RECORD REGISTRATION DATABASE TRANSITION. **K. Brown.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Maricopa County Department of Public Health, Office of Vital Registration - Michele Castaneda-Martinez, B.A.
- 4:00 EVALUATION OF DATA COLLECTION AND DATA VISUALIZATION IN A LARGE HEALTHCARE ORGANIZATION. **C. Lwin.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Dignity Health - Kaitlin Macenka, BS.
- 4:20 GEOGRAPHIC DISTRIBUTION OF EMERGENCY MEDICAL CARE TECHNICIANS (EMCTS) AUTHORIZED TO PERFORM STR SKILLS. **C. Tirdea.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: The Arizona Department of Health Services Bureau of Emergency Medical Services & Trauma System - David James Harden, JD.
- 4:40 INCREASING ACCESS TO NALOXONE THROUGH A STANDING ORDER IN UTAH. **N. Vamianakis.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Utah Department of Health - Meghan Balough, MPH, CHES.

Session V – The Practice of Public Health
(Phoenix Building 2, Room 2309)

- 1:20 DEVELOPMENT OF AN EXPERT CONSENSUS GUIDELINE FOR SKIN CANCER SCREENING IN SOLID ORGAN TRANSPLANT RECIPIENTS. **L. Crow.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: M. Moe Bell, MD. Site and Preceptor: UCSF Department of Dermatology, High Risk Skin Cancer Program - Sarah Arron, MD, PhD.
- 1:40 IMPROVING FEDERAL REIMBURSEMENT IN WESLEY HEALTH CENTER THROUGH FINANCIAL MANAGEMENT. **K. Kartinawati.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Douglas Campos-Outcalt, MD, MPA. Site and Preceptor: Wesley Health Center - Sonya Wilkins, BS.

**Session I:
Environment and Health Policy
1:20 – 4:40**

Drachman Hall, Room A122

Abstracts

APPLICATION OF SAFETY AND INDUSTRIAL HYGIENE METHODS AT NORTH AMERICAS LARGEST COPPER PRODUCING MINE. S. Balland.

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Freeport-McMoRan - Chinenye Ifeanyi-Ileka, MS.

Freeport-McMoRan Inc. (FMI) is an international mining company who specializes in copper and gold; FMI is the world's largest publicly traded copper producer. As an MPH intern at FMI's Morenci site, I worked closely with the Industrial hygienists on staff to expand and apply my knowledge of industrial hygiene (IH) monitoring, software, report writing, and regulations. Specifically, I completed personal monitoring of noise, dust, diesel particulate matter, lead, acid mist, and welding fumes for employees in both the processing and mining divisions of the company. Additional projects I was involved in included refining the confined space inventory and evaluating hazardous gases and monitoring equipment on the leachpads. In addition to gaining experience in IH, I was able to interact with employees to learn their concerns in regard to IH and safety and develop my skills as an industry professional.

INCIDENT MANAGEMENT SYSTEM & RISK MATRIX ANALYSIS AT FREEPORT-MCMORAN NORTH AMERICAN SITES. **E. Began.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Freeport-McMoRan Phoenix Corporate Office - Vicki Seppela.

Risk matrices are used as a tool to evaluate risk. Freeport-McMoRan (FM) started using a new risk matrix to evaluate the risk of all incidents that occurred on sites in 2017. My project during my internship at the FM Corporate office (Phoenix, AZ) was to evaluate the effectiveness of the risk matrix since its implementation at the beginning of 2017. The data taken from FM's Incident Management System (IMS) from October 2016 through May 2017 for all North American sites helped determine the baseline for the quality of incident investigations and the baseline of Corrective and/or Preventative Action Plans. Current trends in the data show a decrease in the number of Actionable Level incidents, and an increase in a number of Monitor Level incidents. The implementation of the Monitor Level into the new matrix helped to classify the incidents of high importance into two categories to help determine the incidents that need immediate actions to be taken, and the incidents that may need actions taken just not immediately. Overall, the data assessed from IMS indicates that the 2017 Risk Matrix is effective at aiding employees in assessing current and potential future risks of an incident.

TOWN OF ORO VALLEY SAFETY MANAGEMENT INTERNSHIP. C. Foster. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Town of Oro Valley Safety Management Department - Char Ackerman, MPA.

Problem: The Town of Oro Valley Safety Coordinator is responsible for developing, coordinating, implementing, evaluating, and administering a safety management program for 500+ city employees with widely varying occupational hazards. Development of a comprehensive safety and health training program is an integral part of improving health and safety for all employees. **Methods:** For each employee job description, a job hazard analysis was completed in order to document occupational hazards associated with each position and to identify OSHA required trainings. With this information, a training matrix was developed to provide a concise snapshot of each position's training requirements. A health and safety training policy was then developed in order to implement the training program, ensure training requirements are met, delineate training responsibilities among employees and management, and set record keeping requirements. **Results:** A training policy was implemented as of September 1, 2017. Implementation of the health and safety training policy has provided town employees with a standardized training plan which will help ensure compliance with federal training requirements as well as equip employees with the skills and knowledge necessary to recognize hazards and prevent injuries and illnesses in the workplace.

INDUSTRIAL HYGIENE INTERNSHIP AT TERRACON CONSULTANTS, INC. D. Koller. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Terracon Consulting Engineers and Scientists - Michael Crandall, MS, BS, CIH, LEED AP.

Mr. Derek Koller performed his MPH internship for Terracon Consultants, Inc. at their Tucson, Arizona location where he also works as Department Manager in the Environmental Services line. Terracon is a 100 percent employee-owned multi-discipline consulting engineering firm specializing in environmental, facilities, geotechnical, and materials services. Mr. Koller worked with the Certified Industrial Hygienist (CIH) out of the Phoenix, Arizona office to gain project experience on a wide range of projects that focused solely on IH work. Specifically, internship project work included conducting exposure assessment walk-throughs for proposal preparation, radon surveys, ventilation surveys, and personal exposure monitoring for both noise and air. The project sites for this work varied and included an aerospace manufacturing facility, two metal-plating facilities, a dry cleaning plant, and low-income housing. Mr. Koller's duties by project also varied and included proposal preparation, budgeting, IH field work, final reporting, and/or document review. In addition to the previously discussed projects, Mr. Koller's internship also included reviewing documents from IH assessments conducted at two coal-fired power-plants and developing a scope of work to include a noise assessment for a brownfields project that will eventually lead to the development of market-rate HUD housing. Mr. Koller's internship was successful in that he was able to conduct IH duties as a technician who conducts the field work and prepares reports for a CIH while also allowing him to develop managerial skills necessary to plan and budget these projects.

APPLICATION OF HEALTH, SAFETY, ENVIRONMENT, AND FACILITIES AT AN AEROSPACE MANUFACTURING SITE. **A. Peng.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: Honeywell Aerospace - James Tucker MTech, CIH, CSP.

Introduction: Honeywell Aerospace is a leading global aviation supplier for commercial, defense, and space industries. The Phoenix Engines facility employs approx. 2,000 employees who contribute to designing, manufacturing, and distributing engines and auxiliary power units. The health, safety, environment, and facilities (HSE&F) team works to ensure the well-being of employees and the community through the enforcement of internal operation standards. Methods: As an HSE&F intern, I worked on providing support for several programs to enforce OSHA and Honeywell standards including noise exposure and heat stress investigations. Honeywell Engines' hearing conservation program (HCP) currently includes approximately 200 employees. An exposure assessment was conducted on heat treat and plating employees to potentially remove them from the HCP. A heat stress report was also conducted on heat treat and plating employees during record high temperatures to determine proper working conditions. Results: A noise control engineering intervention was placed in the work area but results showed the changes were insufficient to remove employees from the HCP. Further adjustments to controls were recommended for future assessment. Heat stress data analysis concluded with recommendations for current working conditions which included enforcing proper work-rest cycle schedules and maintenance of air suppliers. Conclusions: Interning in the HSE&F department allowed me to develop both environmental and industrial hygiene skills. The large scale corporate run manufacturing setting contributed to my understanding of appropriate communication for proper implementation of safety culture.

LEADING KING COUNTY IN THE RIGHT DIRECTION: IMPROVING THE POLICY, INTERNAL COLLABORATION & COMMUNITY ENGAGEMENT STRATEGIES FOR ADDRESSING LEAD EXPOSURE. A. Reynolds.

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Kelly Reynolds, MSPH, PhD. Site and Preceptor: King County Department of Public Health - Kirsten Wyses, MHSA.

King County is home to more than 2 million people, with a large majority residing in and around the city of Seattle. County-level government employees in the environmental health and health equity spectrums sought conceptual collaboration to address lead exposure within the county limits. Lead is one of the earliest known metals, with use dating back to ancient Roman times. The progression of science has determined that there is no “safe” lead exposure level. This summer, I worked within both health equity and environmental health units at the King County Department of Public Health to review lead exposure hazards and patterns within the county. The internship was a prime opportunity to troubleshoot the efficiency of multi-department collaboration. The final report analyzed socioeconomic and political constrictions whilst identifying mitigation methods for lead exposure in high-risk communities. Qualitative analysis of government-based statistical comparisons were conducted that found low-income areas to be more susceptible to high levels of lead exposure. Community engagement programs were explored that may be implemented with the allotted \$250,000 budget dedicated to jumpstarting a lead poisoning prevention program. Policy failures were also identified with propositions for improvement of details that had prevented the passing of prior bills.

ENVIRONMENTAL HEALTH COMMUNITY ASSESSMENT IN BATEY COMMUNITIES OF THE DOMINICAN REPUBLIC. **A. Rookwood.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Stephanie Griffin, PhD, CIH. Site and Preceptor: International Health Organization of Phoenix (IHOP) - Dawn Barcellona, MD.

Introduction: The International Health Organization of Phoenix (IHOP) is a health organization that provides primary health care services to the Batey communities in rural Dominican Republic through mobile clinics. The migrant farmworkers of these communities have been traditionally marginalized due to strict immigration policies and limited social mobility. There is limited research regarding environmental health in these communities. The internship goals were: 1) conduct an environmental health assessment of these communities and 2) identify areas of need for future internships and research. Methods: An observational environmental health assessment was conducted in four Batey communities. This assessment included household demographics data, household assessment data, and secondary medical data. Results: The environmental health assessment showed that the majority of community members used shared latrines, and three Batey communities identified these latrines as being in poor condition. The majority of individuals practiced mosquito prevention and handwashing using soap and water. Use of biomass stoves and storage of water within the home was common. Gastrointestinal symptoms were among the top three diseases reported by all Batey communities. Focus groups identified that the largest health concerns among community members were sanitation and clean water, chronic health diseases, and mosquito-borne illnesses. Conclusion: Environmental health concerns were identified in each community through the observational health assessments and secondary medical data. Further research and programming should be conducted regarding sanitation, garbage disposal and clean water within these communities as this these concerns were highlighted in the survey data.

STATE MEDICAID REFORM: IMPLICATIONS FOR ARIZONA AND THE STATE-FEDERAL MEDICAID PARTNERSHIP. **R. Soliz.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Daniel Derksen, MD. Site and Preceptor: Arizona Health Care Cost Containment System (AHCCCS) - Elizabeth Lorenz, JD.

Cost, coverage and access to high quality care are preeminent challenges in the U.S. health system. The Affordable Care Act allowed states to expand Medicaid eligibility starting in January of 2014. 31 states have since expanded Medicaid, resulting in coverage for an additional 16 million individuals. This includes 600,000 new beneficiaries in Arizona's Medicaid program, the Arizona Health Care Cost Containment System (AHCCCS). These coverage gains correspond with increased expenditures, accounting for 9.2% of the federal budget (1) and comprising 17% of U.S. health expenditures (2). Medicaid is a federal-state partnership. It is often the top expenditure in state budgets. To control Medicaid program costs, states increasingly use waivers (1115) and state plan amendments that must be approved by the Centers for Medicare and Medicaid Services (CMS). Two proposals were researched and drafted in Arizona, and summarized in this report: 1. Health savings accounts (HSAs) are intended to promote personal responsibility and help Medicaid enrollees transition to private insurance markets. 2. Work requirements propose to encourage able bodied adults to seek employment, get training for employment, and thus get employer sponsored insurance. The cost-effectiveness and success of such approaches are controversial. This report reviews the literature and data, synthesizes that analysis, draws evidence-based conclusions where possible, and forecasts the likely impact of such policy interventions for Arizona, and discusses the implications for the future of the state-federal Medicaid partnerships. (1) Feldstein, P. (2015). Health Policy Issues. Health Administration Press: Chicago, Illinois. (2) Martin, A., Hartman, M., Washington, B., Catlin, A. (2017). National Health Expenditures. Health Affairs 36(1).

MODIFYING RECRUITMENT EFFORTS, INCREASING STUDENT KNOWLEDGE OF HEALTH INSURANCE, AND CREATING TARGETED LEARNING OBJECTIVES WITH PROJECT SHARE. M. Price. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Daniel Derksen, MD. Site and Preceptor: Arizona Center for Rural Health - Alyssa Padilla, MPH.

Project SHARE, established in 2015 by the University of AZ Center for Rural Health, trains health professional graduate students as Certified Assisters, and offers students opportunities to discuss insurance eligibility within the community. Students discuss the Affordable Care Act (ACA) and Marketplace related questions with community members, developing skills to discuss such topics in their personal and professional networks. Program assessment indicated participants had increased understanding of the basic components of the ACA, comfort levels discussing the ACA, and likelihood of engaging in ACA discussions in personal/professional settings. The goals of this student internship included 1) modifying recruitment efforts to emphasize recruitment among cultural centers, 2) increasing basic health insurance knowledge amongst the student body, and 3) selecting expert speakers to deliver supplemental presentations to SHARE participants with established learning objectives. Recruitment methods included listserv and flyer distribution, tabling efforts, and social media informational video outreach. Outreach was expanded to include three additional on-campus cultural centers. After implementation, we observed a 140% increase in applications, 8.7% increase in applicants who identified as non-white, & 59% increase in Public Health students. Health Insurance 101 sessions were held in undergraduate courses to increase educational outreach among the general student body. After outreach to professors, we observed a 3-fold increase in sessions held in Fall 2017 as compared to the year prior. Lastly, learning objectives were created based upon the Alliance for Health Policy essentials on the ACA, AHCCCS, and Medicare. Pre/post-tests were created to capture participant understanding, and will be used to understand student knowledge.

**Session II:
Epidemiological Approaches to Public
Health
1:20 – 4:00**

Drachman Hall, Room A118

Abstracts

INVASIVE MENINGOCOCCAL DISEASE AMONG CALIFORNIA COLLEGE STUDENTS, JANUARY 2011 TO JULY 2017. L. Weinberg.

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Yann Klimentidis, PhD, MS. Site and Preceptor: California Department of Public Health - Jennifer Zipprich, PhD.

Invasive meningococcal disease (IMD) is a rare but potentially deadly illness. College students are at an increased risk of IMD due to social factors such as dormitory living and close contact with other students. In California between January, 2011 and July, 2017, there were a total of 6 confirmed cases related to 2 outbreaks on college campuses, and 48 sporadic confirmed cases. The observed risk factors (dormitory living, freshmen status, fraternity or sorority affiliation, and bar or party patronage) are in line with historical evidence.

Chemoprophylaxis and mass vaccination campaigns continue to be best practices in managing college IMD outbreaks. Detailed social history of future IMD cases should be collected to further support efforts to quantify the relative risk of various demographic, social, and behavioral characteristics.

OPTIMIZING EARLY MOTOR PD STUDIES: FROM DATA INVENTORY TO LONGITUDINAL MODEL. **E. Sheveleva.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Zhao Chen, PhD, MPH. Site and Preceptor: Critical Path Institute - Klaus Romero, MD, MS, FCP.

BACKGROUND: Parkinson's disease (PD) is a progressive neurodegenerative disorder, with urgent need for disease-modifying therapies. Limited clinical trial success indicates the need to improve the quantitative understanding of disease progression and its link to longitudinal biomarker behavior. In earlier stages of disease, non-motor features, together with biomarker information has been shown to increase the predictive accuracy of quantitative descriptions of disease progression. **OBJECTIVE:** The objective was the development of a quantitative model for the progression of the MDS-UPDRS Part I (Movement Disorder Unified PD Rating Scale) to evaluate the contribution of SWEDD status (scans without evidence of dopaminergic deficit) as a predictor of disease progression. **METHODS:** For the model, individual longitudinal data from 470 early stage PD and SWEDD subjects in the PPMI observational study were analyzed in a linear mixed-effects model analysis, using the MDS UPDRS Part I as the dependent variable, and time as the independent variable, with the following covariates: SWEDD status, age, race, sex, postural instability, tremor, rigidity and bradykinesia. **RESULTS:** The progression of the MDS-UPDRS Part I was significantly associated with SWEDD status at baseline (3.0 points, 95% CI: 2.5-3.5) and the presence of postural instability with 2.7 points (95% CI: 1.4-4.1) higher after 60 months. **CONCLUSIONS and PROSPECTIVES:** The conducted analysis indicates that individuals with SWEDD at baseline, and those with postural instability, should be excluded from trials in early motor PD. Next analysis, combining patient-data from several interventional drug-related trials in presented inventory, will remove some limitations of current set of data and develop drug-related model for disease progression in PD.

EFFECTS OF HIV STATUS ON RESPONSE TO TREATMENT FOR NON-METASTATIC CERVICAL CANCER PATIENTS IN LUSAKA, ZAMBIA. M. Trejo. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Robin Harris, PhD, MPH. Site and Preceptor: Cancer Diseases Hospital, Lusaka, Zambia - Amr Soliman, MD, PhD.

BACKGROUND: Cervical cancer is the fourth most common cancer among women worldwide, with highest incidence and mortality occurring in Sub-Saharan Africa. In Zambia, the annual incidence is 58/100,000 and the mortality rate is 36.2/100,000, making it the most common cause of cancer morbidity and mortality among women. HIV is a known risk factor for cervical cancer development and, with a national adult prevalence of 16%, women in Zambia are at high risk. The Cancer Diseases Hospital (CDH) in Lusaka, Zambia is the only tertiary hospital in country that provides specialized cancer treatment; about one third of their cervical cancer patients are HIV positive. This internship sought to develop a database of cervical cancer case information and study if co-infection with HIV was associated with cancer treatment response. **METHODS:** This case-case study included 577 FIGO stage I and II cervical cancer patients seen at the CDH between 2008 and 2012. Abstracted medical record data included age, residence, occupation, comorbidities, cancer treatment, and tumor response to treatment. Data were linked to the national HIV database to obtain information about HIV status, treatment, and compliance. **RESULTS:** Approximately 43% of patients were HIV positive. Of patients who completed their first cycle of radiotherapy, 27% (46% HIV-positive and 54% HIV-negative) had gross residual tumor and 20% (43% HIV-positive and 57% HIV-negative) had progressive disease that resulted in distant metastasis. **CONCLUSIONS:** Linkage of HIV with cancer data will assist in developing education programs for cervical cancer patients about the importance of HIV treatment compliance in improving survivorship. Results will also help professional education of oncologists for better monitoring and management of cervical cancer patients during their HIV treatment.

DETERMINING THE EFFECT OF BREAST DENSITY AND PHYSICAL ACTIVITY ON BREAST CANCER RISK. A. Madden. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Robin Harris, PhD, MPH. Site and Preceptor: Northwestern University- Department of Preventative Medicine - Elizabeth Hibler, MPH, PhD.

Introduction: Mammographic breast density is a risk factor for breast cancer and is common among approximately 43% of U.S. women aged 40-74 years. While previous studies have looked at the relationship between physical activity, breast density and breast cancer risk, these studies have used self-reported physical activity data. This internship focused on development of protocols and procedures for a pilot study of a cross-sectional study of the relationship between breast density and objectively measured physical activity. **Methods:** Participants will be recruited based on review of mammography records from the Northwestern Medicine Enterprise Data Warehouse and an online survey. Eligibility criteria include generally healthy women with dense breasts, aged 40-75, and no history of cancer, diabetes, cardiovascular disease, or thyroid conditions. Participants are asked to wear an ActiGraph physical activity monitor for 7 days, and come to the research clinic for anthropometric measurements and blood samples for analysis of DNA methylation. Initial record review identified 696 women potentially eligible for recruitment. Using SAS software, descriptive analyses focused on characterizing the eligible pool of women. **Results:** Of the 696 women potentially eligible for the study based on age and breast density, the average age at screening was 53.5 years. The majority of women were normal BMI category (18.5-25 kg/m²) and 98.3% had heterogeneously dense breasts and only 1.7% had extremely dense breasts. **Conclusions:** The recruitment pool of women for this physical activity study will include predominantly white, non-Hispanic women in their lower to mid 50s, with heterogeneously dense breasts. The impact of this select pool will need to be considered in the larger study.

AZ RURAL WOMEN'S HEALTH NETWORK DEVELOPMENT SURVEY. D. Hutchens. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Eyal Shahar, MD, MPH. Site and Preceptor: Arizona Rural Women's Health Network - Leah Meyers, MSW.

The Arizona Rural Women's Health Network strives to improve the health of all women living in rural areas of Arizona. The network's mission is to build partners' capacity to cultivate and promote practices and services that improve the health of women in rural Arizona. To further this mission a development survey was administered to healthcare providers and community members. The goal was to determine the priority health needs of the communities as well as the resources and partnerships necessary to assist them. The survey consisted of 9 questions: 4 free response, 2 multiple choice, and 3 ranking questions. Over the last year and half the data was compiled into a master database and analyzed. There were 298 total participants and of these 212-229 correctly completed at least 1 of the ranking questions. The county with the most completed surveys was Apache County (18% of total) and La Paz was the county with the least completed surveys (0% of total). 87% of survey participants were female, 9% were male, and 3% did not specify. Community Health Centers was the most prevalent organization of origin with 29% of participants working in CHCs and 24% of the participants were community health workers. The top five needs for adolescent girls in rural communities are Dating/Domestic violence, access to health care services, family planning, sexual violence, and unintended/unplanned pregnancy. The top five needs of women in rural communities as identified by the survey are access to health care services, domestic violence, chronic diseases/conditions, sexual violence, and depression. Lastly, the top five needs for pregnant women in rural communities as identified by the survey are access to healthcare services, access to health insurance, prenatal care, breastfeeding, and alcohol use during pregnancy.

OPERATING ROOM PERFORMANCE IMPROVEMENT PROJECT. P. Margossian. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Robin Harris, PhD, MPH. Site and Preceptor: Carondelet St. Mary's Hospital - Sue Gold, MSN, RN.

Introduction: The goal of this internship was to identify workflow inefficiencies in operating rooms at St. Mary's Hospital in Tucson, Arizona specifically first case on-time starts (FCOTS) and turnover time (TAT). These studies can enhance management's understanding of critical bottlenecks and problematic workflow steps. **Methods:** Time study sheets were developed and 35 first cases and 29 turnover cases were observed over two work week periods. Outcome measures included compliance, time averages between process steps, and identification of barriers to meeting target times. Secondary time data relating to FCOTS and TAT compared intern's observations with departmental data. Staff delay report sheets determined primary delay reasons. **Results:** Of the 35 first cases, only 34% (n=12) were on time. Delay contributors included surgeon late, anesthesiologist late, and patient delayed in pre-op. Of the 29 turnaround cases, 62% were delayed and did not meet the turnover goal of 30 minutes. Average turnover time for the first time study was 35.67 minutes and 34.13 minutes during the second time study. Analysis revealed inconsistencies between intern and department data in delay reporting for both first cases and turnovers. **Recommendations:** The perioperative area would benefit from 1) setting firm arrival times for physicians, 2) identifying all delays throughout the surgical process, potentially during debrief, 3) obtaining consensus on delay reasons, and 4) conducting additional OR staff training to readdress roles defined by the parent company. Potential strategies for implementing these recommendations are being discussed with administrators. **Conclusion:** Improving first case on time starts and turnaround times is crucial for maximum operating room efficiency and increased patient, staff, and surgeon satisfaction.

INTEGRATING ANIMALS IN ELDERLY CARE RESIDENTIAL FACILITIES. M. Luna. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Elizabeth Jacobs, PhD. Site and Preceptors: Las Haciendas on the River - Dr. Dieter Steklis and Netzin Steklis.

In today's society, there is a steady increase in the longevity of individuals. As the elderly population increases, the need for health services that focus on the geriatric community becomes more essential. Health services, such as Animal Assisted Therapies (AAT) and Animal Assisted Activities (AAA), that emphasize on the overall health of an individual are crucial. The purpose of this project is to describe the benefits and challenges of having animal (pets, AAT, AAA) interactions in an elderly care facility. In the literature, it has been reported that individuals in an elderly care facility tend to experience loneliness and a lack of confidence, due to limitations of the aging process. However, there has also been research on ways to try to mitigate or alleviate those symptoms in different populations, especially in an elderly care facility. One way was to incorporate AAA and/or AAT. The assessment of animal interactions, specifically the equine modality, took place at Las Haciendas on the river, a new elderly care facility in Tucson. The residents of the facility can openly participate in the equine modality and each session takes place three times per week for approximately two hours. Upon observation, it was noted that the residents were positively influenced and were more active, since the start of the modality. The facility also provides several safety precautions to protect not only the horse but all of the individuals at the facility. The evaluation of program was made by observation of the equine sessions and procedures. The results found can help strengthen current equine programs and/or help other elderly care facilities implement their own equine program. This will further assist the geriatric community by offering different modalities to help with overall health and wellness.

EVALUATION OF ZIKA CAMPAIGN ADVERTISEMENTS AND EFFECTIVE MESSAGING AMONG PUBLIC HEALTH PROFESSIONALS AND THE GENERAL PUBLIC. **D. Carr.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Kristen Pogreba-Brown, PhD, MPH. Site and Preceptor: Arizona Department of Health Services - Joli Weiss, PhD.

INTRODUCTION: Arizona residents have a risk of acquiring Zika virus due to frequent international travel and close proximity to Mexico. To address this, Arizona Department of Health Services (ADHS) began a Zika awareness campaign with goals to address Zika prevention, education, and awareness among travelers, pregnant women, and the public. Three Zika campaign ads were assessed to determine their effectiveness at disseminating important Zika messages. **METHODS:** Zika campaign goals were carefully reviewed to determine formatting and content for a questionnaire. The questionnaire was developed and administered among public health professionals and the downtown Phoenix community. Response data were entered into Survey Monkey and analyzed using Epi Info. **RESULTS:** 153 surveys were administered. Majority of respondents were female, aged 20-44, and worked in a public health profession. Respondents identified travelers as the target audience of the Zika ads and 59-72% believed the ads conveyed that they should be cautious of mosquitos. 50% of respondents believe the ads may make people feel uneasy about acquiring Zika at home and while traveling. Respondents were neutral regarding effectiveness of the ads in targeting pregnant women, men, and sexual transmission. Overall, the ads were considered to be attention grabbing, culturally appropriate, and age appropriate. **CONCLUSION:** The Zika campaign ads were effective at raising awareness of Zika risks among Arizona populations that travel frequently. Messaging geared toward pregnant women, men, and sexual transmission were not as effective and should be improved in future awareness efforts. In comments, respondents noted the ads to be very attention grabbing, but the mosquito head concept was sometimes unappealing. Results will be used by ADHS to improve and direct future campaigns.

**Session III:
Addressing Barriers to Health Access
1:20 – 4:00**

Drachman Hall, Room A120

Abstracts

DEVELOPMENT AND IMPLEMENTATION OF A DATABASE FOR THE NATIONAL ALLIANCE ON MENTAL ILLNESS (NAMI) OF SOUTHERN ARIZONA. **J. Trejo**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Nicole Yuan, PhD, MPH. Site and Preceptor: NAMI of Southern Arizona - Bernadette Grandinetti.

BACKGROUND: The National Alliance on Mental Illness of Southern Arizona (NAMI) offers free advocacy, education and support to individuals with Serious Mental Illness, their families, and friends since 1983. NAMI's goal is to eliminate stigma and offer hope for recovery and a fulfilling life to their members. NAMI is funded by private donations, membership dues, grants, government funding, and reimbursement from the Arizona Medicaid system. NAMI has been affected by recent changes to the reimbursement system, shifting to a value-based purchasing model. **OBJECTIVES:** The development and implementation of a database tracking system of member involvement in NAMI programs and to evaluate member satisfaction with the Peer-to-Peer program. **METHODS:** After learning about the services provided by NAMI and current data collection methods, the intern worked with the Program Director to identify outcomes that would be useful to track for reimbursement. The intern created a Microsoft Access database with information from 100 members using NAMI's electronic health records. The intern also modified a previous survey to evaluate member satisfaction with the Peer-to-Peer program. Thirteen members completed the satisfaction survey and a short report was created. **RESULTS:** Results from the satisfaction survey showed that members were satisfied with the course information, gained knowledge, and experienced positive impacts on their lives. **CONCLUSION:** NAMI staff continue to use the new Access database to track member information and program involvement. This database has increased NAMI's ability to track intended outcomes for their programs and this new data will help them apply for future funding.

CREATING A HEALTHY TOMORROW: MINDFULNESS FOR CHILDREN. **K. James.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Burris Duncan, MD. Site and Preceptor: El Rio Health - Shelley Whitlach, MS.

Does a Mindfulness Program for Vulnerable Elementary-School Children Improve Their Health Outcomes? El Rio Community Health Center, AmeriCorps Community Schools Initiative, the University of Arizona Public Health Program, and Tucson Unified and Sunnyside School Districts worked jointly to provide a six-week, twelve-session mindfulness curriculum in third grade classrooms. This paper presents the program evaluation results of the 'Creating a Healthy Tomorrow Mindfulness Curriculum' developed by Kyla James and Gloria Montijo in response to school counselors and psychologist reports of high incidence of behavioral problems, emotional trauma and toxic stress in students. The curriculum was administered to 54 third grade students over five months in two Title 1 Tucson elementary schools, Santa Clara and Hollinger Elementary. Student population demographics were comparable in the two schools with the exception of a 10% greater Native American population in Santa Clara. Classrooms who received the mindfulness intervention were measured for change pre to post intervention using the Child Health and Illness Profile, Kinder Behavioral Rubric, and attendance and behavioral referral records, as well as compared to classrooms who received music art and library curriculum as usual. Increases in child resilience, impulse control, and academic achievement with a decrease in disruptive behavior are anticipated based on the existing mindfulness for children research literature.

BULLYING AMONG COLLEGE STUDENTS. L. Mayate. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Velia Leybas Nuño, PhD, MSW. Site and Preceptor: Disability Resource Center (DRC) - Sue Kroeger; Ed.D.

INTRODUCTION There is a gap in the literature in the area of bullying in college. Existing data largely focuses on the middle and high school experience. This project aims to 1) identify the proportion of students reporting bullying experiences as the victim, witness or perpetrator and, 2) to determine whether these experiences differed among students with disabilities. These findings contribute to the research of bullying in academic environments. **METHODS** Undergraduates ages 18 years or older enrolled at the University of Arizona during the 2017 fall semester participated in a cross-sectional study. Participants received an anonymous, online survey distributed via listservs. Survey questions were adapted from the Bully Survey – Student Version. Chi-square analysis compared groups. **PRELIMINARY RESULTS** Overall 146 answered the survey questions, 21% reported being recipients, 29% witnessed, and 0.9% reported perpetrating. The prevalence of students reporting any bullying role was 39%. Students who were recipients were more likely to report witnessing acts of bullying in others (59% versus 23%); but contrary to our hypothesis, the reports of being a recipient were lower than bystanders and perpetrators combined. Having a disability did not increase the likelihood of victimization nor was it identified as a primary reason for the bullying, despite 50% of those with a disability reporting their disability as one of the reasons for bullying. **CONCLUSION** Final results will be shared with the Disability Resource Center and Campus Health in efforts to bring awareness to what services can be offered to mitigate bullying behavior. In addition to frequency, this data will provide insight to the reasons for bullying and its effects on the recipient, witness, and perpetrator.

EVALUATION OF TUCSON MEDICAL CENTER'S OUTPATIENT BREASTFEEDING SUPPORT CLINIC. **A. Urbon-Bonine.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Christina Cutshaw, PhD. Site and Preceptor: Tucson Medical Center - Noreen Carver, RN, IBCLC.

Background Tucson Medical Center's Outpatient Breastfeeding Clinic serves new mothers in Southern Arizona who need additional help with breastfeeding after release from the hospital following delivery. In 2015, the Tucson Medical Center Foundation awarded \$30,000 to renovate the Outpatient Breastfeeding Clinic and provide access to women who would not otherwise be able to afford breastfeeding support, including women covered by AHCCCS. Objectives To determine the efficacy of the Outpatient Breastfeeding Clinic as measured by breastfeeding rates at 3 and 6 months, and by client satisfaction with the clinic. Methodology Data were gathered through a focus group of clinic clients (n=4), and interviews with TMC Lactation Consultants (n=7). We also conducted phone surveys of clinic clients. Out of 130 clients using the services between August and November of 2015 and June and October of 2016, we received responses from 58.5% at 6 months (n=76). Results Three and six month breastfeeding rates for Outpatient Breastfeeding Clinic clients, as measured by self-reported responses on phone surveys, are significantly higher than national and state breastfeeding rates as well as Healthy People 2020 Goals. Grant-funded clients have significantly higher breastfeeding rates than Arizona Women, Infant, and Children (WIC) customers. Most surveyed women (97.4%) reported positive experiences with the Outpatient Breastfeeding Clinic. Conclusions TMC's Outpatient Breastfeeding Support Clinic is an effective, valued, and valuable resource for breastfeeding mothers in southern Arizona. Continuation of the program is recommended.

ARIZONA COLLEGE PREP ACADEMY SCHOOL HEALTH INDEX ASSESSMENT AND INTERVENTION. **C. Brower.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Cynthia Thomson, PhD, RD. Site and Preceptor: Arizona College Prep Academy - Charlene Mendoza, M.Ed.

Background: This project sought to promote wellness among students and staff at Arizona College Prep Academy (ACPA) in Tucson, Arizona. Using the CDC's Wellness Coordinator model and collaborations with community organizations, the intern helped form a School Health Advisory Committee (SHAC) and Student Wellness Advocacy Team (SWAT) to design interventions targeting health priority areas in the school. Methods: ACPA's SHAC used the CDC's School Health Index (SHI) assessment tool, developed an Action Plan based on SHI findings, and prioritized specific Action Plan items based on criteria such as time and cost. SWAT students and staff collaborated to implement multiple interventions. The intern assessed outcomes via a Student Wellness Survey given in fall and spring semesters, and a SWAT Feedback Survey gauging impact of interventions. Results: Based on the SWAT Feedback Survey, interventions with highest impact included: activity challenges during Spirit Weeks; a sugar tax changing snack bar prices; a field trip to Tucson Village Farm; and Wellness Wall posters. After SWAT interventions, 39.6% of students reported changes in attitude about beverages, foods (37.5%), and mental health (36.5%). Students also reported choosing healthier drinks (26%) and foods (25%), and making choices to promote their health (33%). Student Wellness Surveys indicated little or no change in self-reported soda drinking and non-starchy vegetable consumption, and no measurable difference related to handling stress from fall to spring semester. Conclusions: Continued collaboration between students and staff, including maintaining a Wellness Coordinator and SWAT team, has potential to increase health behaviors among ACPA students. An outcome-specific evaluation plan will direct future action steps to assure program health impact.

A GAP ANALYSIS BETWEEN THE U.S. JUSTICE SYSTEM AND THE MEXICAN HEALTHCARE SYSTEM THROUGH BINATIONAL TUBERCULOSIS COLLABORATIONS. G. Jauregui. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Maia Ingram, MPH. Site and Preceptor: Arizona Department of Health Services, Office of Border Health - Robert Guerrero, MBA.

Along the U.S./Mexico border, people share similar cultures, economies, health issues, and communicable diseases. Binational collaborations are designed to address collective health issues and increase public health coordination between countries. The purpose of this project was to examine binational tuberculosis (TB) programs and explore how these programs collaborate on public health issues, which pose a grave danger to populations in Mexico and the U.S. Through the Arizona/Sonora Meet & Greet Binational Tuberculosis Treatment Program and other binational collaborations in Arizona and across the four border states, this gap analyses explores the inconsistencies between the U.S. justice system and the healthcare system in Mexico that do not permit efficient partnerships between the two countries. Data collection included key informant interviews from five different counties in Arizona, field observations in binational meetings, and the evaluation of existing international health policies across the border states. Binational programs across the U.S./Mexico border have been successful in preventing the spread of communicable diseases. Although all programs reported positive progress controlling TB on both sides of the border, gaps were found between the U.S. justice system and the Mexican healthcare system. These included: not having a mutual understanding of the importance of finishing TB treatment, not sharing the same laws/policies, and inconsistent hours of operations. This project highlights the importance of binational public health collaborations in order to address shared public health issues like communicable diseases in the U.S. and Mexico. Due to the distinct manner by which the U.S. justice system and Mexican health care systems operate, both countries will make slow progress in closing these gaps.

COMMUNITY PERCEPTIONS OF BARRIERS TO EMERGENCY CARE UTILIZATION IN RURAL UGANDA. **A. Pickering.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Hal Strich, MPH. Site and Preceptor: Global Emergency Care - Bradley Dreifuss, MD.

Background: Karoli Lwanga Hospital and Global Emergency Care operate an Emergency Department in Uganda's Rukungiri District. Despite available Emergency Care (EC), preventable death and disability persist due to delayed patient presentations. Implementation of effective EC requires assessment community members' perceived barriers to obtaining timely EC. Methods: Twenty community-based focus groups (CFG, N=157) were conducted in 11 locations with varied geography, healthcare resources, and socioeconomics. CFGs addressed hypothetical scenarios, and participants' EC experiences. An interdisciplinary and multicultural data analysis team used the Multi-Investigator Consensus and Framework Methods. Results: Barriers to the decision to seek care were: limited knowledge of emergency presentations and first aid, and delay while seeking advice. Upfront cost, especially for transport, was a barrier to reaching care. Barriers to obtaining adequate care at health facilities included: use of proximal health facilities for first aid and care that failed to meet participants' expectations. Structural barriers to EC utilization focused on poverty and lack infrastructure in rural areas. Sociocultural barriers, reported less frequently, included male dominated financial decision making and use of traditional herbal remedies as first aid. Conclusions: Educational interventions to increase emergency recognition and first aid, such as lay person first responder trainings, are needed to overcome protracted decision making and use of proximal clinics for "first aid". An emergency transport system with no upfront cost is needed to address lack of transportation infrastructure and liquid assets. Generally, this research methodology was effective and could be of value when implementing EC systems in similar settings.

DEVELOPING A PROGRAM PLAN FOR A DISPENSARY OUTREACH PILOT PROGRAM. **D. Davis.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Douglas Taren, PhD. Site and Preceptor: Pohnpei State Department of Health Services - Dr. Brian P. Mangum, PhD, MSc, FRSPH, FRAI, IPFPH.

The Pohnpei State Department of Health Services is responsible for providing health care and health education for residents of Pohnpei. One of their up and coming projects is to develop and pilot an outreach service program in the rural villages of Madolenihmw in hope of increase access to health care. I was chosen as a summer intern to help create a program plan for this pilot program alongside dispensary health assistants who had no previous experience in writing program plans. Before starting to design the program plan, focus groups were orchestrated with village chiefs after reviewing evidence-based literature; these focus groups were conducted in early June with the help of the not only the Pohnpei State Department of Health Services, but the World Health Organization and International Organization of Migration. After the focus groups, a list of patterns and themes was generated to help guide the activities in the program plan. The actual creation of the program plan took place at the two dispensaries in Madolenihmw alongside the dispensary health assistants as stated above, who were actively taught what a program plan entails as they assisted in writing the outreach service pilot program plan. After numerous meeting and drafts, the final program plan was established in last July. Overall, this internship allowed me to not only demonstrate my own skill that I have learned while in my master's program, but also increased the public health capacity of others while also helping build a foundation for a future program plan.

**Session IV:
Strengthening Health Services
1:20 – 5:00**

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

Abstracts

VOTING TREND ANALYSIS ON HEALTH CARE POLICY AMONG ARIZONA STATE LEGISLATORS. **A. Hernandez.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Cecilia Rosales, MD, MS. Site and Preceptor: University of Arizona Mel Enid Zuckerman College of Public, Division of Public Health Practice and Transitional Research – Daniel Hernandez, Jr., BA.

BACKGROUND: Research shows that a legislator's ideology is the most important predictor of how they vote on healthcare issues far more than party affiliation or public opinion (Shor, 2017). Health-related bills and policy have become a highly politicized and controversial topic, and party affiliation trumps race, class, and gender in predicting political views and values (Pew Research Center, 2012). **OBJECTIVE:** The survey conducted aims to identify the key issues lawmakers look for before supporting bills as well as their voting trends related to health care legislation in Arizona. **METHODS:** A literature analysis was conducted to inform the development of an instrument designed to survey legislators using a Self-Reported Random Survey using Qualtrics. **RESULTS:** Twenty Legislators participated in this survey, representing thirteen different Arizona legislative districts. Both Democrats and Republicans participated, including members of both the State Senate and the State House. Some key results of the survey include the following: legislators typically vote party line, the bill's sponsors are critical for support, constituents and local organizations can influence the way they vote and personal experiences influence the way legislators tend to vote on health bills. **RECOMMENDATIONS:** The process of working with legislators on health care policy should reflect the ideology of the lawmakers to appeal to them based on nonpartisan data as they have expressed they vote party line. Advocacy groups should encourage community members to reach out to legislators as it may influence the way they vote. It is critical to work with both Democrats and Republicans in order to create health policy change.

QUALITY IMPROVEMENT PROCESS FOR THE CLINICAL AND TRANSLATIONAL RESEARCH CENTER AT U OF A: IDENTIFYING AND REDUCING BARRIERS TO INCREASE VOLUME. A. Alarcon. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: The University of Arizona Clinical and Translation Science Research Center - Maria Gordon, MS.

Introduction: The Clinical and Transitional Research Center (CaTS) is a medical research facility designated to support investigative clinical research at the University of Arizona. CaTS provides excellent services to their university clients but needs to increase client volume. This provided an opportunity to perform a quality improvement process project to help CaTS determine how to increase service use. The primary objective of this project was to identify the possible barriers that CaTS faces regarding patient/researcher volume and develop possible solutions to reduce these barriers. Methods: To gather information about CaTS, interviews with staff members were performed. A communication survey was then provided as a follow-up. Other research clinics were contacted to collect information to compare with CaTS. Surveys were then sent to investigators who had used the CaTS facilities before. After obtaining all information, a quality improvement process was implemented using Plan-Do-Study-Act (PDSA) cycles. Cycles were meant to recognize CaTS barriers and weaknesses. Results: The information gathered indicated that compared with other clinics CaTS did not have any type of marketing. The inside interviews showed there are limited resources and space. The questionnaire revealed that communication was excellent within the staff. Satisfaction survey shows a positive feedback for the organization. Along the PDSA cycles, all information gathered strengthen CaTS as an organization and makes it easier for them to approach a plan to increase volume of researchers. Conclusion: Vision and Core values were created for CaTS, and other recommendations were provided considering the results of information gathered and the PDSAs cycles such as taking advantage of the upcoming 10th year anniversary to boost their presence on campus.

EVALUATION & DEVELOPMENT OF MARKETING STRATEGY FOR THE ARIZONA ONCOLOGY FOUNDATION. **S. Frye.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Arizona Oncology Foundation - Becky O'Hara, BS.

Introduction The Arizona Oncology Foundation (AOF) is a non-profit organization that aims to support cancer patients using methods outside of traditional medicine. The AOF offers low to no cost services, such as massage, counseling, hypnosis & yoga. The goal of this project was to assess and develop a marketing strategy to increase referrals. **Methods** A literature search was conducted to determine ways to optimize marketing. Studies show patients are more likely to use integrative therapies if recommended by a health care professional, specifically a physician or nurse. However, there is a lack of information available on how to incorporate integrative modalities into their practice. Patients visiting the AOF were given a survey asking for their referral source. **Results** A tailored marketing strategy was designed and a physician was then invited to speak to nurses from various oncology practices regarding targeted integrative therapies for specific patients. Data from 2 months before the presentation were compared to data collected 2 months after the presentation. Prior to the presentation, 89 new patients filled out referral surveys. Results showed 26 were from physicians, 17 from other, 16 from friends, 8 self-referred, 7 from flyers and 5 did not specify. After the presentation, 41 new patients filled out forms. Of those, 14 referrals were from physicians, 3 other, 5 friends, 7 self-referral, 2 flyers and 9 unspecified. **Conclusion** The literature suggests that providing education to health care professionals on integrative therapies may promote their usage, but tracking referrals within the AOF proved difficult. Further efforts are recommended to keep professionals up-dated on new developments in integrative modalities. Better referral tracking may enable a more accurate assessment of these efforts.

IMPROVING EMPLOYEE COMPLIANCE THROUGH CALL-MONITORING PROCESS INITIATIVES. **T. Grogg**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Arizona Smokers' Helpline - Uma Nair, PhD.

BACKGROUND: The Arizona Smokers' Helpline (ASHLine) is the state of Arizona's tobacco cessation quitline. Housed within the University of Arizona's Mel and Enid Zuckerman's College of Public Health, ASHLine began operating in 1995, with the express goal of providing a free, client-directed, collaborative approach to smoking cessation treatment. ASHLine delivers evidence-based behavioral coaching in both English and Spanish, and provides eligible clients with the opportunity to receive free over-the-counter nicotine replacement therapy. **OBJECTIVE:** The goal of this internship was to assess the quality of services delivered during the client enrollment process and improve employee compliance with organizational policies and procedures through call-monitoring initiatives. **METHODS:** A review of current academic and gray literature was conducted. A baseline analysis was then developed, followed by staff training, delivery of educational materials, and an assessment of individual performances between intermittent quality improvement measurements. Quality improvement activities were performed with a series of informal Plan-DO-Study-Act (PDSA) cycles. **RESULTS:** The baseline analysis identified compliance concerns, which resulted in a comprehensive quality improvement initiative. This included development of standardized scripts, Q&A's with staff, didactic training in addressing challenging topics and eliminating common intake call errors. **RECOMMENDATIONS:** The call monitoring process should be maintained and amended with future analyses focusing on compliance with organizational standards and improving interviewer skills. Additionally, staff training regarding organizational procedures and individual performance reviews should be conducted on a quarterly basis to ensure the delivery of quality service.

**REVIEW ON END OF LIFE CARE PREFERENCES FOR VETERANS
DIAGNOSED WITH CANCER IN SOUTHERN ARIZONA. E. Smith.**

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair:
Gail Barker, MBA, PhD. Site and Preceptor: Southern Arizona Veterans Affairs
Health Care System - Maria Bishop, MD, FACP, BSN.

Introduction: This internship was conducted at Southern Arizona Veterans Affairs Health Care System (SAVAHCS) in Tucson, Arizona. The purpose of this project was to evaluate the process for discussing and obtaining advance directives (AD) from veterans diagnosed with cancer at SAVAHCS. **Methods:** 600 medical records from three separate years were randomly pulled from SAVAHCS's hematology/oncology clinic for analysis. 200 records were pulled from each year grouping: year five (May 2012-2013), year three (May 2014-2015), and year one (May 2016-2017). Only patients who were diagnosed with cancer were included in the analysis, for a total sample size of 366. AD discussion and completion rates by specific year, sex, and cancer type were compared for the entire sample.

Results: Overall 51% of the patients in the sample had ADs on file. No record of AD discussion was documented for 9% of the sample. Years three and five had AD completion rates of 52% while year one had a completion rate of 48%. The overall AD completion rate for men was 52% and for women was 37%.

Conclusion/Recommendations: SAVAHCS could benefit from increasing the educational component regarding ADs through the use of social work services. Using social workers is important because this is an uncomfortable topic for some patients and they may not fully understand the purpose of an AD. The first conversation should take place between the patient and the physician, but social work services can be useful after the conversation with their physician. Another recommendation is for SAVAHCS providers or social workers to follow-up on AD conversations with patients who do not fill out an AD while in the clinic/hospital.

ONE IN SIXTY-EIGHT: EXPLORING THE DISPARITIES AND GAPS IN AUTISM-RELATED HEALTH SERVICES IN YUMA COUNTY. B. Demara. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Leila Barraza, JD, MPH. Site and Preceptor: Regional Center for Border Health, Inc. - Amanda Aguirre, RD.

Yuma County is an Arizona county that lies on the border region between the United States (US) and Mexico. Previous work has shown that populations residing in rural and border regions within the US are more likely to experience health disparities. One particular public health issue that has often gone overlooked has been identifying health services delivery and access issues for children with disabilities and their families, such as for children with autism spectrum disorder (ASD). The health disparities many children with ASD and their families face when living in rural and border regions are likely compounded because they face the healthcare service and access challenges inherent in rural and border regions (e.g., lack of transportation and health provider shortages), as well as those that are unique to individuals with special healthcare needs stemming from having a disability (e.g., a greater need for specialty health services and therapies/treatments). The Regional Center for Border Health, Inc. (RCBH) is interested in building an autism center in South Yuma County to meet the needs of children with ASD and their families and requested a community needs assessment focusing on this population. Parent focus groups, community provider interviews, and community surveys were conducted as part of this needs assessment. From the assessment, it was found that parents and providers alike found a need for more ASD providers and education about ASD, and that more efforts to increase ASD awareness are necessary in the community. The RCBH is in a unique position to address a substantial number of the needs found due to the organization's existing and potential resources. This community needs assessment will be an invaluable asset when RCBH moves forward with plans to build and create an autism center in Yuma County.

5-YEAR FINANCIAL PROJECTION FOR THE JUNTOS POR LA SALUD MOBILE HEALTH CLINIC. M. Thomae. University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: UACOM - Phoenix, Juntos Por La Salud Mobile Health Unit - Matt Eckhoff, MPH.

Introduction-The Juntos Por La Salud (JPLS) mobile unit offers free health screenings to underserved Latino populations in the Phoenix area. The mobile unit's goal is to become a primary care outpatient clinic, and the change in service delivery will require additional revenue and resources. The objective of this 5-year Projection is to help sustain the mobile unit as it evolves into a licensed clinic. **Methods-**JPLS's current financial documents were reviewed to determine a baseline. Market research was then conducted on other mobile outpatient clinics, financial models, billing procedures, and external funding to determine the necessary measures the mobile clinic must implement to sustain itself. Treatment and services were based on the requirements of the Arizona Administrative Code, estimated costs of goods per treatment, and health disparities listed by JPLS. The anticipated number of treated patients used in this projection was determined from interviews with the mobile unit's current staff. **Results-**The mobile clinic is projected to have a financial deficit after determining the costs of medical supplies, payroll for mobile clinic staff, treatment costs, potential revenues, and auxiliary costs. Research showed the mobile health clinic must increase patient volume, find more funding, implement billing and collection activities, hire medical staff, and expand services to become a licensed outpatient clinic. **Conclusion/Recommendations-**JPLS should seek a primary care physician to oversee the mobile clinic, utilize the correct procedural codes for proper reimbursement, seek funding opportunities from external sources, increase their current patient population, expand their medical services, increase staffing, and partner with insurance companies and establish itself as preferred provider organization.

TRANSITION FROM VSIMS TO DAVE • A DEATH RECORD REGISTRATION DATABASE TRANSITION. **K. Brown.** University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Maricopa County Department of Public Health, Office of Vital Registration - Michele Castaneda-Martinez, BA.

BACKGROUND: Registration of vital events is critical to understanding population health and can be a useful data source when making health policy decisions. Registration of vital events has been occurring in the United States since the 17th century, but has increased in sophistication and quality since that time. The state of Arizona implemented a new death registration database (DAVE) on October 2, 2017. The goal was to increase quality and timeliness in processing death records. **OBJECTIVES:** The objectives of this internship were to anticipate the impact of the new database on funeral home partners and the Maricopa County Department of Public Health, Office of Vital Registration, a local registrar. Additionally, the creation and implementation of training was anticipated to assist with the rollout of DAVE. **METHODS:** A funeral home survey was launched in March 2017 to determine funeral home billing preferences and determine if it would be necessary to create a separate billing process external to the DAVE system's billing module. **RESULTS:** Funeral home partners preferred to submit an online application for death certificates that did not include a surcharge and preferred to continue using monthly charge accounts. This meant that an external procedure to the DAVE system was necessary. A funeral home training video and a user's manual on this new process were created in September 2017 to assist funeral home partners. **CONCLUSION:** During the DAVE system rollout, facilitation between many different partners was necessary to ensure that appropriate training and resources were available for the various stakeholders involved. As a result of this internship, a funeral home training video and user's manual were created to assist funeral home partners with the new process for ordering death certificates.

EVALUATION OF DATA COLLECTION AND DATA VISUALIZATION IN A LARGE HEALTHCARE ORGANIZATION. **C. Lwin**. University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Dignity Health - Kaitlin Macenka, BS.

BACKGROUND Dignity Health is the fifth largest health system in the United States. It owns/operates 39 hospitals and 400 care centers in the southwest region. In 2017, an Ambulatory EHR system (Cerner) was implemented. The implementation process required the team to develop procedures for data collection, management, and visualization. Data included fields such as clinic location, health record/billing information, and clinic license type. **OBJECTIVES** The goal was to migrate the data onto Salesforce, a cloud-based Customer Relationship Management platform. The project consisted of evaluating and updating the current data intake workflow, researching new data collection methods, reporting, employing visualization, and ensuring the viability of incorporating provider data. **METHODS** A data dictionary was created and existing data was sent to regional directors to update, validate and provide new information. The data was then analyzed and sorted to maximize accuracy and efficiency in the visualization process. The implementation processes were observed and discussed within cross-functional teams to determine whether to also include provider licensing information. **RESULTS** New objects in Salesforce were programmed to limit errors and to reinforce consistency by using picklists, multi-picklists, and relationships. New provider information was added to track the licensing status. During the internship, data for 5 out of 7 regions were migrated successfully onto Salesforce. **RECOMMENDATIONS** Data should be updated quarterly using the note and notification tools on Salesforce. Regional Directors should have all the current information about clinics in their regions. Provider licensing numbers and the expiration dates should be included to prevent extra charges from incurring if providers work at two or more sites.

GEOGRAPHIC DISTRIBUTION OF EMERGENCY MEDICAL CARE TECHNICIANS (EMCTS) AUTHORIZED TO PERFORM STR SKILLS. C. Tirdea. University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: The Arizona Department of Health Services Bureau of Emergency Medical Services & Trauma System - David James Harden, JD.

BACKGROUND: The Arizona Department of Health Services (AZDHS) is a state governmental agency committed to the health and wellness of all Arizonans. The Bureau of Emergency Medical Services and Trauma System (BEMSTS) is a division of the AZDHS and is responsible for establishing and coordinating a system of emergency medical services and trauma care at the state level.

OBJECTIVE: The current project was undertaken to determine the extent to which Emergency Medical Service (EMS) agencies and medical directors authorize special training required (STR) skills for all four Emergency Medical Care Technician (EMCT) certification levels (EMT, EMT-I 99, AEMT and Paramedic), as listed in Table 5.1 of Arizona Administrative Code. **METHODS:** Data collection efforts were performed to obtain updated contact information for all the EMS agency representatives. This was followed by designing and distributing a quantitative statewide survey to all EMS agencies. The survey was designed to determine the geographical distribution of EMCTs providing STR skills and STR skills performed. **RESULTS:** Survey results were analyzed using tables and geographic information system (GIS) mapping. A spreadsheet comprised of updated EMS medical director contact information and EMCTs trained to use STR skills by certification levels was produced. Results show that 70% of the EMS agencies use STR skills mostly at the EMT and Paramedic certification level. Findings were presented to the Medical Direction Statutory Commission. **RECOMMENDATIONS:** The contact information of the EMS agency representatives should be updated annually. The survey results should be analyzed in comparison with the trauma registry to identify geographic areas that might benefit from increasing STR skills. This could help reduce trauma related morbidity and mortality statewide.

INCREASING ACCESS TO NALOXONE THROUGH A STANDING ORDER IN UTAH. N. Vamianakis. University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Gail Barker, MBA, PhD. Site and Preceptor: Utah Department of Health - Meghan Balough, MPH, CHES.

BACKGROUND: The Utah Department of Health (UDOH) is the premier public health organization in Utah. The Executive Director for UDOH signed a statewide initiative, which created a Naloxone Standing Order (NSO). This allowed naloxone to be dispensed at community retail pharmacies in Utah without a prescription. **OBJECTIVE:** This project was created in order to safely and effectively dispense naloxone in the community, and advocate for retail pharmacies to sign up to dispense naloxone under the UDOH NSO.. **METHODS:** A literature review of other states' comparable naloxone pharmacist websites was conducted. Input from pharmacy leadership in the community and UDOH staff were taken into consideration to develop a state website. Define, Measure, Analyze, Improve, and Control (DMAIC) methodology was performed to determine the best marketing strategy for NSO. **RESULTS:** In late September 2017, the pharmacist page on the UDOH Naloxone page was updated with information for pharmacists to dispense naloxone in the community under the standing order. Marketing and promotion efforts to encourage retail pharmacies to sign up to dispense naloxone under the UDOH standing order were not entirely successful because they had already adopted their own standing order or collaborative practice agreements. From December 9, 2016 to September 1, 2017, a total of 148 pharmacies signed up to dispense naloxone under the standing order. **RECOMMENDATIONS:** It is recommended that next year, UDOH representatives visit community pharmacies during their Talk To Your Pharmacist month campaign to educate them on the positive impact of increased naloxone access in the community. In addition, an anonymous survey should be filled out by anyone who directly administers naloxone to reverse an overdose. This will help UDOH track naloxone usage in the community.

Phoenix Only

Session V: The Practice of Public Health 1:20 – 2:00

Phoenix Building 2, Room 2309

Abstracts

DEVELOPMENT OF AN EXPERT CONSENSUS GUIDELINE FOR SKIN CANCER SCREENING IN SOLID ORGAN TRANSPLANT RECIPIENTS. L. Crow. University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: M. Moe Bell, MD. Site and Preceptor: UCSF Department of Dermatology, High Risk Skin Cancer Program - Sarah Arron, MD, PhD.

Skin cancer is the most common malignancy affecting solid organ transplant recipients (SOTR), with an increased risk for developing melanoma and nonmelanoma skin cancers compared to the general population. However, there are currently no consensus guidelines for routine screening for skin cancer surveillance in SOTR. The objective of this project was to form an expert panel of US dermatologists and transplant physicians in order to conduct a Delphi survey to establish standardized, consensus screening recommendations for SOTR. Three rounds of surveys were distributed via email to panelists. Consensus was set a priori to be 80% agreement of experts. 84 expert panelists completed all three rounds of the Delphi process. Panelists agreed that patients should be risk assessed by the transplant team, to stratify for screening referral. Panelists agreed on the need for an evidence-based risk assessment tool that is time-efficient and can be completed by office staff, to feasibly implement into current clinical practice. Panelists agreed that a dermatologist should perform full body examinations for skin cancer screening. According to the consensus risk stratification, all Caucasian, Asian, Hispanic, and high risk African American patients should be screened within 5 years after transplant. High risk Caucasian patients should be screened within 2 years after transplant. No consensus was reached for low risk African American SOTR. All SOTR with a history of skin cancer should follow standard of care for skin cancer surveillance. We propose this systematic approach to skin cancer screening in SOTR based on consensus of experts in the fields of dermatology and transplant medicine. Future directions will include development of a risk stratification tool to guide appropriate referral to dermatology for skin cancer screening.

IMPROVING FEDERAL REIMBURSEMENT IN WESLEY HEALTH CENTER THROUGH FINANCIAL MANAGEMENT. K. Kartinawati.

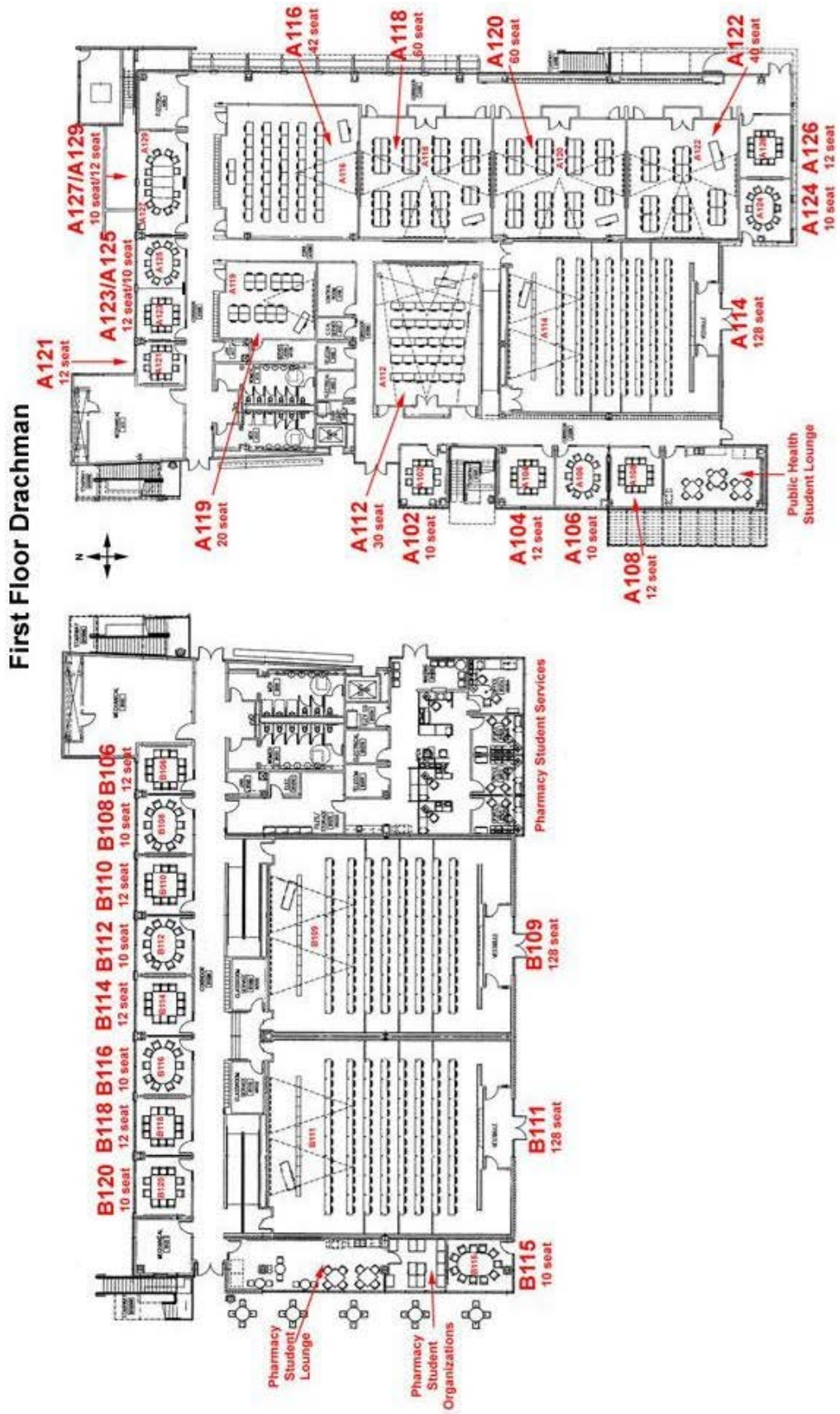
University of Arizona, Phoenix, AZ, U.S.A. MPH Internship Committee Chair: Douglas Campos-Outcalt, MD, MPA. Site and Preceptor: Wesley Health Center - Sonya Wilkins, BS.

Background: Wesley Health Center (WHC) is located in South Central of Phoenix, Arizona which is certified as an FQHC in 2009 and funded through federal grants from ARRA and HRSA. In Fiscal Year 2016, WHC served 10,159 visits in which 55% patients live at or below 100% of the FPL; thereby it plays a significant role as a valuable safety net provider to vulnerable populations.

Method: For my internship, I worked to analyze the financial situation to gain perspective on how to improve the federal reimbursement as the major sources of funding. I created and assisted some projects, such as establishing the cost, filling the UDS to qualify as FQHC, assisting the Medicare Cost Report (MCR) to maximize legal reimbursement, analyzing the financial history, calculating ratios, and designing dashboard to measure performance. **Result:** Establishing cost to maintain federal reimbursement needs some steps from cost analysis, calculating relative value unit, and financial statements analysis. From all of these steps, we could fill on the paperwork needed to submit an up-to-date and accurate MCR.

During my internship, the MCR has been approved by the CMS which ensures future reimbursement by Medicare. In addition, I also learned to report the UDS 2016 which is a valuable opportunity to documenting the operation and performance of health center. **Conclusion:** To evaluate the cost and achieve cost control, health center needs to benchmark its cost based on the quality and quantity of provided services. As an FQHC, approximately 53% of WHC revenues were derived from the government grants which is contingent upon complying the grant requirements from the federal. Therefore, WHC should ensure the validity, accuracy, and timeliness of the cost analysis and MCR, while also planning to diversify its source of revenues.

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. A keynote speaker opens the meeting and the remainder of the conference is comprised of several concurrent sessions of student presentations grouped by theme.

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

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