

THURSDAY, JANUARY 11

6:00 p.m. – 7:15 p.m.

POSTER SESSION 1 (#31-118)

Group1 Medical/Student, Resident, Fellow

Group Color: Blue

#48 Cumulative Success of Prehospital Advanced Airway Management in a National Cohort

Jeffrey Jarvis, Dustin Barton, Henry Wang, Williamson County EMS

#75 Variation in the Characteristics of Patients with Acute Stroke Arriving by EMS Versus Those Arriving by Private Vehicle

Robert O'Connor, Karen Braden, Joseph Carrera, Nicole Chiota-McCollum, Lillian Currie, Elizabeth Hundt, George Lindbeck, Karen Johnston, University of Virginia School of Medicine

#102 Implementing a Prehospital Protocol to Treat Behavioral Emergencies with Midazolam Leads to Effective Control of Agitated Patients

Christopher Richards, Ryan Huebinger, Katie Tataris, Joseph Weber, Kenneth Pearlman, Eddie Markul, Matthew Strzalka, Mark Kiely, Leslee Stein-Spencer, Leslie Zun, Northwestern Feinberg SOM Department of Emergency Medicine and Center for Healthcare Studies, Chicago EMS System

#114 A National Description of Patient Refusals following Prehospital Administration of Naloxone

Mirinda Gormley, Juan Lu, Virginia Commonwealth University

#115 EMS Compass Benchmarks Using a National EMS Dataset: Status Epilepticus & Hypoglycemia Performance Measures

Jeffrey Jarvis, Dustin Barton, Lauren Sager, Nick Nudell, Williamson County EMS

#54 Identification of Sepsis in the Prehospital Setting: An Observational Study of Paramedic Sepsis Screening Strategies

Daniel Lane, Ian Blanchard, Gerald Lazarenko, Laurie Morrison, Steve Lin, Hannah Wunsch, Sheldon Cheskes, Refik Saskin, Damon Scales, Institute of Health Policy, Management and Evaluation, University of Toronto

#66 Air Versus Ground Transfer to Comprehensive Stroke Center in Patients with Large Vessel Occlusion Stroke

Ali Shams, Chris Kanaan, Rebecca Grysiewicz, Chris Kazmierczak, Laura Steucher, Robert Swor, Beaumont Health

#71 Interfacility Transport of the Pregnant Patient: A 5-year Retrospective Review of A Single Academic Center Based Critical Care Transport Program

Philip Nawrocki, Asa Margolis, Shawn Brast, Matt Levy, Johns Hopkins Lifeline

#80 Direct Transport to Comprehensive Stroke Center May Not Expedite Reperfusion of Large Vessel Occlusion Stroke

Ali Shams, Chris Kanaan, Rebecca Grysiewicz, Chris Kazmierczak, Laura Steucher, Robert Swor, Beaumont Health

#83 Change in Quantitative Ventricular Fibrillation over Bouts of Chest Compressions in CPR

Matthew Sundermann Sundermann, David Salcido, James Menegazzi, University of Pittsburgh

Group 2 Student, Resident, Fellow
Group Color: Dark Green

#38 A Kink in the Stroke Chain of Survival: Is EMS Appropriately Prenotifying the ED of Suspected Strokes?

Jeffrey Nusbaum, Nachiketa Gupta, Alec Glucksman, Michael Redlener, Kevin Munjal, Mount Sinai Hospital, New York, NY

#45 Are There Disparities in Dispatch CPR Instruction Receipt and CPR Performance?

Amanda Amen, Patrick Karabon, Brian McNally, Cherie Bartram, Kevin Irwin, Kimberly Vellano, Robert Swor, Oakland University William Beaumont School of Medicine

#46 Utilization of Emergency Medical Resources at Mass Gathering Events at an Urban University with a Collegiate-Based Emergency Medical Services Agency

Emma Ordway, Neil Sarna, Lindsey DeGeorge, Jose Nable, Georgetown University

#51 Medical Command Training for Emergency Medicine Residents: An Overview of Medical Command Education, Oversight, and Evaluation

Abagayle Renko, Nicholas Julius, Chadd Nesbit, Penn State Milton S. Hershey Medical Center

#53 Astounding Rates of Suicidality in EMS Providers: A Hidden Epidemic

Al Lulla, Jyotirmoy Das, Ghady Rahhal, Rebecca Dougherty, Bridgette Svancarek, Washington University in St. Louis

#58 Feasibility of Recording Out-of-Hospital Cardiac Arrest Treatment Via Use of a Mobile Smartphone Application

Samuel Sondheim, Joseph Devlin, William Seward IV, Aaron Bernard, Richard Feinn, David Cone, Frank H. Netter MD School of Medicine, Quinnipiac University

#59 The Influence of Neighborhood Socioeconomic Status on Disparities in Emergency Medical Services Use and Quality of Prehospital Care for Ischemic Stroke

Timmy Li, Manish Shah, Adam Kelly, Jeremy Cushman, David Rich, Edwin van Wijngaarden, Gina Lovasi, Courtney Jones, Northwell Health

#60 Paramedic Recognition of Paroxysmal Supraventricular Tachycardia

Spencer Sample, Colleen Shortt, Erich Hanel, Michelle Welsford, Michael G. DeGroote School of Medicine, McMaster University

#61 Police Department Tactical Medicine (TACMED) Program Impact on Trauma Patient Mortality: A Review of a Large Urban EMS and TACMED System

Elliot Ross, David Wampler, Avery Kester, Xandria Gutierrez, Crystal Perez, Lauren Reeves, Alejandra Mora, Joseph Maddy, Craig Manifold, San Antonio Uniformed Services Health Education Consortium

#63 Gender Disparities in the Prehospital Setting among Known ST-Segment Elevation Myocardial Infarction Patients

Krystal Baciak, Stephen Sanko, Marc Eckstein, University of Southern California-Los Angeles County and Los Angeles Fire Department

Group 3 Student, Resident, Fellow

Group Color: Fuchsia (Dark Pink)

#64 A Statewide Retrospective Analysis on the Characteristics of EMS Refusals of Care
Novneet Sahu, Patrick Matthews, Ross Megargel, Rutgers - New Jersey Medical School

#72 The Advanced Provider Response Unit (APRU), An Answer to Low-Acuity 911 Calls?
Saman Kashani, Stephen Sanko, Marc Eckstein, USC Keck School of Medicine, Dept of Emergency Medicine, Los Angeles Fire Department

#73 Predictive Value of Each Component Field Triage Guidelines on Hospital Outcome in EMS-treated TBI
Sola Kim, Sang Do Shin, Kyoung Jun Song, Young Sun Ro, Jeong Ho Park, Seoul National University Hospital

#85 Push Dose Epinephrine Use in Critical Care Transport
Francis Guyette, Gabriela Galli, Neal McQuaid, Jonathan Elmer, Christian Martin-Gill, University of Pittsburgh

#101 Association between Initial Blood Glucose in Out-of-Hospital Cardiac Arrest and Return of Spontaneous Circulation
Caitlin Howard, Hattie McAviney, David Wampler, Jeremy Allen, Justin Smith, David Miramontes, Joan Polk, United States Army, UTHSCSA

#103 Termination of Resuscitation Checklist: Duration and Outcomes of Resuscitation
Katherine Kuefler, Aurora Lybeck, Thomas Grawey, M. Riccardo Colella, Medical College of Wisconsin

#104 A Qualitative Evaluation of Community Paramedic Care Transitions Intervention Coach Training
Hunter Lau, Matthew Hollander, Jeremy Cushman, Amy Kind, Courtney Jones, Michael Lohmeier, Manish Shah, University of Wisconsin School of Medicine and Public Health

#110 Clinical Events in Prehospital Patients with ST-elevation Myocardial Infarction Transported to a PCI Center by Basic Life Support Paramedics in a Rural Region
Pierre-Alexandre LeBlanc, Sylvain Bussi eres, Fran ois B egin, Alain Tanguay, Jean-Michel Paradis, Denise H ebert, Richard Fleet, D epartement de m edecine d'urgence – Universit e Laval, Qu ebec, Canada

#113 Paramedic Recognition and Management of Anaphylaxis in the Prehospital Setting
Rakesh Gupta, Krystyna Samoraj, Simerpreet Sandhanwalia, Matt Kerslake, Luke Ryan, Colleen Shortt, Michelle Welsford, McMaster University

Group 4 Operations, Quality, Safety Systems

Group Color: Light Green

#33 Benchmarking EMS Compass Stroke Performance Measures Using a Large National Dataset
Jeffrey Jarvis, Dustin Barton, Lauren Sager, Nick Nudell, Williamson County EMS

#35 Confirming the Safety and Feasibility of a Bundled Resuscitation Technique Involving a Head-Up/Torso-Up Mechanical Chest Compression Technique for Cardiopulmonary Resuscitation
Paul Pepe, Kenneth Schepke, Peter Antevy, Daniel Millstone, Charles Coyle, Craig Prusansky, Sebastian Garay, Johanna Moore, University of Texas Southwestern Medical Center, Dallas TX

#37 Reprioritization of 911 Emergency Medical Calls Using Historical Clinical Data

Veer Vithalani, Sabrina Vlk, Steven Davis, Neal Richmond, Office of the Medical Director; MedStar Mobile Healthcare

#42 Paramedics Providing Palliative Care at Home: Patient and Family Satisfaction

Alix Carter, Judah Goldstein, Marianne Arab, Michelle Harrison, Barbara Stewart, Mireille Lecours, Carolyn Villard, James Sullivan, Dalhousie University

#44 Prehospital Evidence-Based Guideline Implementation Methodology: A Systematic Literature Review

Jennifer Fishe, Remle Crowe, Rebecca Cash, Nikiah Nudell, Christian Martin-Gill, Christopher Richards, University of Florida COM Jacksonville, Department of Emergency Medicine

#124 Evaluation of Educational Methods for Prehospital Medical Command (PMC) Training for Emergency Medicine Residents (EMRs)

Jeffrey Luk, Cristina Carpintero, Stephanie Gaines, Amy Pound, University Hospitals Cleveland Medical Center/CWRU School of Medicine

#49 Benchmarking EMS Compass Performance Measures Using a Large National Dataset: Pediatric Care

Jeffrey Jarvis, Dustin Barton, Lauren Sager, Nick Nudell, Williamson County EMS

#52 Near Misses in a Two-Tiered Suburban EMS System – A Descriptive Study on Down-Triaged Patients Who Are Taken Emergently to the Operating Room or Admitted to Intensive Care Units

Joslyn Joseph, Joshua Bucher, David Feldman, Albert Ritter, Frederick Fiessler, Morristown Medical Center

#55 Preliminary Impact of Adding Follow-up Home Visits on Call Volumes Generated by EMS “Super-Users” Enrolled in a New Mobile Integrated Health Protocol

Roger Stone, Jamie Baltrosky, Alan Butsch, Ashley Robinson, Barry Reid, Montgomery County MD Fire Rescue Services

#67 Patient Preferences toward Emergency Medical System Provider Attire

Jesse Olsen, Jeffrey Lubin, Khaled Iskandarani, Penn State College of Medicine

Group 5 Cardiac

Group Color: Orange

#77 Rearrest Incidence and Post-ROSC Rhythms after Prehospital Return of Spontaneous Circulation in Out-of-Hospital Cardiac Arrest

Amber Rice, Joshua Gaither, Daniel Spaite, Vatsal Chikani, Sean Wentworth, Tyler Vadeboncoeur, Taylor George, Terry Mullins, Bentley Bobrow, University of Arizona

#78 Effect of Early Detection by Dispatcher on Survival Outcomes after Out-of-Hospital Cardiac Arrest

Seo Young Ko, Sang Do Shin, Kyoung Jun Song, Ki Jeong Hong, Young Sun Ro, So Yeon Kong, Tae Han Kim, Seoul National University Hospital, Seoul, Republic of Korea

#79 The Impact of Real Time Chest Compression Feedback Increases with Application of the 2015 Guidelines

Kenan Kunstal, Tiffany Hoyne, Sara Wattenbarger, Stacie McCauley, Laurel Linder, Daniel Davis, ZOLL Medical

#86 Adherence to Recommendations for Prehospital Cardiac Arrest Care across an EMS System of Care: How Well Are We Implementing Guidelines?

Jonathan Kamrud, Lori Boland, Andrew Stevens, Jessica Jeruzal, Charles Lick, Allina Health Emergency Medical Services

#87 Recognition of Out-of-Hospital Cardiac Arrest during Emergency Calls by Community Level Public Awareness of Cardiopulmonary Resuscitation: A Multi-level Analysis

Sun Young Lee, Young Sun Ro, Sang Do Shin, Kyoung Jun Song, Ki Jeong Hong, Soyeon Kong, Tae Han Kim, Seoul National University Hospital

#88 Effect of Text Message Alert System for Trained Citizens on Bystander Cardiopulmonary Resuscitation and Survival to Discharge in a Metropolitan City: A before-after Population-based Study

Sun Young Lee, Sang Do Shin, Kyoung Jun Song, Ki Jeong Hong, Young Sun Ro, Soyeon Kong, Tae Han Kim, Seoul National University Hospital

#89 Comparison of Manual vs. Mechanical Chest Compression Quality during Prehospital Cardiac Resuscitation

Joshua Gaither, Amber Rice, Chengcheng Hu, Robyn McDannold, Margaret Mullins, Daniel Spaite, Tyler Vadeboncoeur, Taylor George, Terry Mullins, Bentley Bobrow, University of Arizona

#97 Feasibility of Manual Active Compression Decompression CPR in a Thirty-Degree Head Up Position

Heather Ellis, David Chase, Ventura City Fire Department

#98 Television and Film Depict Unrealistic Rates of Cardiac Arrest Survival

Johanna Innes, Brian Clemency, Maxwell Diddams, Peter Natalzia, Deborah Waldrop, University at Buffalo

#100 Usefulness of Epinephrine in Cardiac Arrest

James Hehl, Matthew Wells, Beth Langley, JE Winslow, Cape Fear Valley Mobile Integrated Healthcare Cumberland County EMS

Group 6 Pediatric/Student, Resident, Fellow

Group Color: Pink

#31 Appropriate Needle Length for Emergent Pediatric Needle Thoracostomy Utilizing Computed Tomography

Maria Mandt, Kathleen Adalgais, Kari Hayes, Fred Severyn, Children's Hospital Colorado

#90 Is Prehospital Epinephrine Used Appropriately in Pediatric Anaphylaxis?

Joslyn Joseph, Brian Walsh, David Feldman, Morristown Medical Center

#91 Pediatric Out-of-Hospital Cardiac Arrest Outcomes before and after Implementation of a Standardized Resuscitation Tool

Scott Alter, Lisa Clayton, Richard Paley, Richard Shih, Florida Atlantic University

#108 "PDTree": Development of a New Pediatric Prehospital Transport Destination EBG

Jennifer Fishe, Kye Fratta, Jennifer Anders, University of Florida COM - Jacksonville, Department of Emergency Medicine

#109 Duplicate Procedures and Charges Associated with Pediatric Inter-facility Transfer from Emergency Departments

Ali Aledhaim, Jon Mark Hirshon, Jennifer Fishe, Jennifer Anders, University of Maryland Department of Emergency Medicine

#84 The Utilization of a Province Wide EMS System by Children and Youth with Mental Health Complaints

Aaron DeRosa, Michael Zhang, Judah Goldstein, Carl Jarvis, Md Shamsuzzaman, University of Prince Edward Island, Atlantic Regional Training Centre

**Group 7 Operations, Quality, Safety Systems/Professional
Group Color: Purple**

#68 Multivariable Analysis of Factors Associated with EMS Non-transports

Rickquell Tripp, Jonathan Elmer, MD MS, Francis Guyette, MD MPH, Christian Martin-Gill, MD MPH, Department of Emergency Medicine, University of Pittsburgh School of Medicine

#70 Characteristics of Emergency Medical Technician Graduates Unsuccessful on the National Certification Cognitive Examination

Rebecca Cash, Remle Crowe, Madison Rivard, Ashley Larrimore, William Krebs, Jeremy Miller, Ashish Panchal, National Registry of Emergency Medical Technicians

#81 Benchmarking EMS Compass Cardiac Performance Measures Using a Large National Dataset

Jeffrey Jarvis, Dustin Barton, Lauren Sager, Nick Nuddel, Williamson County EMS

#82 Characteristics Associated with Success on the National AEMT Certification Examination

Madison Rivard, Rebecca Cash, Remle Crowe, Jeremy Miller, Ashish Panchal, The National Registry of Emergency Medical Technicians

#93 Prehospital Blood Pressure Measurement in Major Traumatic Brain Injury: Concordance Between EMS Provider Documentation and Non-Invasive Monitor Data Tracking

Octavio Perez, Octavio Perez, Eric Helfenbein, Bruce Barnhart, Saeed Babaeizadeh, Dawn Jorgenson, Chengcheng Hu, Vatsal Chikani, Joshua Gaither, Samuel Keim, Duane Sherrill, Daniel Spaite, University of Arizona

#94 Evaluating the Gender Gap in EMTs and Paramedics Obtaining National EMS Certification from 2007 to 2016

William Krebs, Remle Crowe, Rebecca Cash, Madison Rivard, Ashley Larrimore, Christine Hamilton, Ashish Panchal, Department of EM, The Ohio State University Wexner Medical Center, Columbus, OH

#95 Impact of Community Paramedic Home Visits on CHF Patients: A Pre-Post Assessment of Heart Failure on Quality of Life

Sandi Wewerka, Joseph Pasquarella, Ann Majerus, Aaron Burnett, Matthew Simpson, Paula Miller, Regions Hospital

#107 Community Paramedic Partnership: Shifting Healthcare Utilization through Partnership between Municipal Fire/EMS and the Local Level I Trauma Center

Tia Radant, Joseph Pasquarella, Ann Majerus, Matthew Simpson, Paula Miller, Sandi Wewerka, Aaron Burnett, Regions Hospital EMS

#41 Influence of Patient Race on Administration of Analgesia by Student Paramedics

Bill Lord, Sahaj Khalsa, University of the Sunshine Coast

#56 Multi-disciplinary Community Health Care Interventions Reduce EMS Utilization by Elders

Joseph Petrosino, Jeffrey Boyd, Joanne McGovern, James Dziura, Gina Stover, Fangyong Li, Geliang Gan, Ryan Carter, Sandy Bogucki, Dept of Emergency Medicine, Yale University School of Medicine

#116 Analysis of Medication Storage Temperatures in a Modern EMS Fleet: Preliminary Results from the Analysis of Medication Storage Temperatures Trial (afire)

Timothy Burns, Alan Butsch, Cristopher Touzeau, Roger Stone, Barry Reid, Montgomery County (MD) Fire and Rescue Service

**Group 8 Cardiac
Group Color: Red**

#32 A Descriptive Analysis of Defibrillation Vector Change for Prehospital Refractory Ventricular Fibrillation

Matthew Davis, Andrew Schappert, Jay Loosley, Kristine VanAarsen, Shelley McLeod, Sheldon Cheskes, Department of Medicine, Division of Emergency Medicine, Western University; SWORBHP

#34 Effect of Instructor's Real-Time Feedback during Layperson Cardiopulmonary Resuscitation Training on Quality of CPR Performances: A Prospective Cluster Randomized Trial

So Yeon Kong, Sang Do Shin, Kyoung Jun Song, Tae Han Kim, Gwan Jin Park, Department of Emergency Medicine, Seoul National University Hospital

#39 Interaction Effects of Communities and Advanced Airway Management on Survival after Out-of-Hospital Cardiac Arrest: Multi-level Analysis

Dongsun Choi, So Yeon Kong, Tae Han Kim, Jeong Ho Park, Kyoung Jun Song, Young Sun Ro, Ki Ok Ahn, Sang Do Shin, Seoul national university hospital, Department of emergency medicine

#40 Rapid Cycle Deliberate Practice and Coaching of Specific Interventions Improves Cardiopulmonary Resuscitation Quality Measures in Teams of EMS Providers

Christopher Berry, Pamela Humphrey, Anthony Halupa, Stephen Taylor, Jarrett Shugars, Douglas Kupas, Geisinger Health System

#43 Amplitude Spectrum Area Changes during Cardiopulmonary Resuscitation after Different Durations of Untreated Cardiac Arrest in a Porcine Model of Ventricular Fibrillation with a Concurrent Acute Myocardial Infarction

Giuseppe Ristagno, Francesca Fumagalli, Weilun Quan, Giovanni Babini, Roberto Latini, Yongqin Li, IRCCS-Istituto di Ricerche Farmacologiche Mario Negri, Milan, Italy

#50 AEDs on Wheels: A Pilot Programme to Equip Taxis with AEDs

Alexander White, Desmond Mao, Vernon Kang, Marcus Ong, Singapore General Hospital

#57 The Effect of Sodium Bicarbonate Administration during Out-of-Hospital Cardiac Arrests on End-Tidal CO₂ Readings in Considering Termination of Resuscitation

Brandon Morshedi, Alysha Joseph, Ray Fowler, University of Texas - Southwestern

#62 Optimizing Deployment of Mechanical CPR Does Not Improve OHCA Outcomes When Compared with Manual CPR

Brandon Oyler, Louis Gonzales, Jeff Hayes, Mark Escott, Jose Cabanas, Paul Hinchey, Lawrence Brown, Dell Medical School at the University of Texas

#65 Feasibility of Point-of-care Ultrasound (POCUS) in Out-of-Hospital Cardiac Arrest (OHCA) by Novice Ultrasonographers

James Fitzgibbon, Emily Lovallo, Marek Radomski, Jeremiah Escajeda, Christian Martin-Gill, University of Pittsburgh Medical Center

#69 Among STEMI Patients, Inferior ST Elevation Is Not Associated with a Higher Frequency of Hypotension after Field Nitroglycerin

Nichole Bosson, Jayson Morgan, Benjamin Isakson, Amy Kaji, Atilla Uner, Katherine Hurley, Timothy Henry, Marianne Gausche-Hill, James Niemann, LA County EMS Agency

#74 Effect of Chest Compression Parameter Variation on Waveform Characteristics of the Ventricular Fibrillation Electrocardiogram

David Salcido, Matthew Sundermann, Allison Koller, Rena Sufrin, John Kucewicz, Pierre Mourad, Graham Nichol, James Menegazzi, Adeyinka Adedipe, University of Pittsburgh School of Medicine

#76 Carotid Blood Flow Is Dependent on Rate and Duty Cycle during CPR

Joshua Lampe, Karen Moodie, Jeffrey Gould, Christopher Kaufman, Norman Paradis, Feinstein Institute for Medical Research

**Group 9 Disaster/Operations, Quality, Safety Systems/Pediatric/Student, Resident, Fellow/Trauma
Group Color: Yellow**

#36 Intraosseous Access Use in Chemical, Biological, Radiation and Nuclear Personal Protective Equipment

Tim Collins, Clinical & Medical Affairs, Teleflex Medical

#96 Seatbelt Use by Ambulance Personnel in the Patient Compartment Is Low Regardless of Patient Presence, Seating Position, or Patient Acuity

Rebecca Cash, Evan Crowe, Remle Crowe, Madison Rivard, Anne Knorr, Ashish Panchal, Douglas Kupas, National Registry of Emergency Medical Technicians

#99 Benchmarking the Use of Red Lights & Sirens in 911 Systems: A Review of a Large, National Dataset

Jeffrey Jarvis, Dustin Barton, Lauren Sager, Nick Nudell, Williamson County EMS

#112 Assessment of Intraosseous Needle Placement by EMS Providers

Alexandra Petrie, Jeffrey Lubin, Penn State College of Medicine

#92 Comparison of Commercial Tourniquets in a Pediatric Trauma Patient Model

James Vretis, Center for Tactical Medicine

#106 When Dogs Fly: Use of Air Medical Services to Transport Operational K9s Injured in the Line of Duty

Chelsea Hogan, Chadd Nesbit, Department of Emergency Medicine, Penn State Milton S. Hershey Medical Center

#111 Description of Drug-Assisted Intubation in Statewide Treatment Protocols

Steven Sommerville, Daniel Wilner, David Schoenfeld, Beth Israel Deaconess Medical Center

#105 Emergency Medical Services Response to Mass Shooting and Active Shooter Incidents, United States, 2014-2015

Matthew Sztajnkrzyer, Aaron Klassen, Morgan Marshall, Mengtao Dia, N Clay Mann, Mayo Clinic
Department of Emergency Medicine

#118 The Relationship between Adult Body Mass Index and Anticipated Failure Rate of Needle Decompression Using a 5cm Needle for Tension Pneumothorax

John Lyng, Kristin Pokorney-Colling, Michaela West, Gregory Beilman, North Memorial Health
Ambulance & Air Care

#137 Prehospital Availability and Use of Medications for Managing Hazmat Emergencies

Kubwimana Mhayamaguru, Amber Bellafore, Eric Lederer, Carl Youngs, Robert French, Joshua Gaither,
Kristina Waters, Frank Walter, The University of Arizona