

# Albert Frederick Brown

TPS CV Template

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## Degrees

- 1986 M.P.A., Environmental Policy Analysis, Arizona State University, Tempe, Arizona, United States  
Dissertation: A study of occupation related pancreatic cancer in Arizona residents; a capstone research project
- 1975 B.S., Zoology/pre-med, Arizona State University, Tempe, Arizona, United States

## Work Experience

### 2016 - Ongoing

Senior Lecturer, Arizona State University; Fulton Schools of Engineering, Phoenix, Arizona, United States

### 2008 - 2016

Lecturer, Arizona State University; Fulton Schools of Engineering, Phoenix, Arizona, United States, 2016

### 2007 - Ongoing

President, Brown Environmental Consulting, Phoenix, Arizona, United States

### 2005 - 2008

Academic Professional, Arizona State University; Fulton Schools of Engineering, Mesa, Arizona, United States, 2008

### 1995 - 2005

Director, Maricopa County Environmental Services Department, Phoenix, Arizona, United States, 2005

**1986 - 1995**

Environmental Manager, Arizona Department of Environmental Quality, Phoenix, Arizona, United States, 1995

**1977 - 1986**

Section Manager, Arizona Department of Health Services, Phoenix, Arizona, United States, 1986

**1976 - 1977**

Environmental Health Specialist, Pinal County Health Department, Florence, Arizona, United States, 1977

**Awards / Honors / Fellowships**

**Spring 2016 - Spring 2016**

*Top Five Percent Faculty Teaching Award*

ASU/FSE, Award Date: 2016-05-20, Mesa, AZ

**Spring 2013 - Spring 2013**

*Harold B. Woodward Award*

Arizona Public Health Association, Service, Award Date: 2013-05-24, Phoenix, AZ,

Highest award from this organization

**Spring 2008 - Spring 2018**

*Andy Nichols Service Award*

Arizona Public Health Association, Service, Award Date: 2008-05-23, Phoenix, AZ

**Fall 2005 - Fall 2005**

*Newsmaker of the Year*

Arizona Republic, Recognition, government service, Date: 2005-12-31, Phoenix, AZ., for boil water order response affecting 1.25 million population.

## **Professional Licensures & Certifications**

Arizona Registered Sanitarian/Environmental Health Specialist, June 1976-December 2021, Arizona Department of Health Services, Arizona, 227, professional; required for environmental health professionals working in public trust positions.

Certified Public Manager Level 4, December 1990, Arizona State University, Arizona, professional, Issued by ASU Institute of Public Executives, no expiration date.

OSHA 40-hr Hazardous Waste Emergency Operations Response, June 1988-May 2021, Arizona State University, professional/technical; Required for hazardous waste/materials workers and trainers. Date and month of initial certification are estimated

NIH Protecting Human Research Participants, June 2012, Arizona State University, Arizona, professional

FEMA Community Emergency Response Team Trainer, December 2012, Arizona State University, Arizona

FEMA IS 100, 200, 700, 800, June 2012, U.S. Federal Emergency Management Agency, Arizona

## **Teaching: Other Activities**

### **Spring 2020 - Spring 2020**

Inter-Tribal Council of Arizona, none, Inhale Resilience Exhale Solutions, Course Start Date: 2020-02-20, Course End Date: 2020-02-20,

This was a one-day seminar. The primary sponsor was ITCA. The ASU-ERM program was a co-sponsor. The topic was climate change effects on air quality.

Number of Participants: 35, New professional development course; 8-hours; Course Delivery Method: On-ground, Team Taught: Yes, Contributors: Dr. Larry Olson; invited speakers, Did participants earn continuing education credit: Yes, Instruction Type: Seminar, Does your unit consider this to be a Research, Service or Teaching Activity?: Service, Course Score: 4.5 out of 5, Instructor Score: 4.5 out of 5

## **Teaching: Curriculum Development**

### **Summer 2020 - Ongoing**

Workplace COVID-19 Safety Training, ERM Professional Development Program, Course Section Number: none, ASU Unit: ERM,

I am the primary curriculum development person and trainer. Monica Cruz Mejia was a student worker/research assistant who provided English to Spanish translations and presentations.

New or revised course: New, Course Delivery: Online, Special Topic Course: Yes, Team Taught: Yes, Does your unit consider this activity to be Research, Service or Teaching?: Teaching

### **Summer 2019 - Ongoing**

Heat Stress Awareness, ERM Professional Development Program, Course Section Number: none, ASU Unit: ERM,

I am the primary curriculum developer and trainer. Assistance was given by the Arizona Department of Health Services.

New or revised course: New, Course Delivery: On-ground, Special Topic Course: Yes, Team Taught: No, Does your unit consider this activity to be Research, Service or Teaching?: Teaching through a training grant

### **Sponsored Projects / Grants**

#### **Completed**

G6: Recycling Program Enhancement Study, Funded by City of Glendale (August 1, 2017 - July 31, 2022), awarded January 30, 2020 (\$5,000.00), Completed, Summer 2017, CoInvestigator Albert Brown (100%)

Above Ground Chemical Storage Tank Inventory and Compliance Update, Funded by City of Glendale (February 1, 2017 - August 31, 2021), awarded March 15, 2019 (\$3,750.00), Completed, Spring 2017, CoInvestigator Albert Brown (100%)

NSF Nanosystems Engineering Research Center for Off-Grid Nanotechnology Enabled Water Treatment (NEWT), Funded by Rice University (July 1, 2016 - June 30, 2018) (\$82,131.20), Completed, Summer 2016, CoInvestigator Christopher Muhich (6%) with CoInvestigator Francois Perreault (8%), CoInvestigator Andrew Maynard (4%), CoInvestigator Qing Hua Wang (2%), CoInvestigator Sefaattin Tongay (6%), CoInvestigator Zachary Holman (2%), CoInvestigator Candace Chan (6%), CoInvestigator Adam Carberry (8%), CoInvestigator Marylaura Thomas (8%), CoInvestigator Christiana Honsberg (4%), CoInvestigator Bruce Rittmann (6%), CoInvestigator Kiril Hristovski (2%), CoInvestigator Peter Fox (8%), CoInvestigator Terry Alford (4%), CoInvestigator Albert Brown (4%)

Sustainability and Solid Waste in Apache Junction, Funded by City of Apache Junction (July 1, 2016 - June 30, 2020) (\$475.00), Completed, Summer 2016, CoInvestigator Malcolm Goggin (19%) with CoInvestigator Kenneth Brooks (37%), CoInvestigator Stephani Etheridge Woodson (6%), CoInvestigator Albert Brown (19%)

Building Joint Advanced Emergency Response Capacity through Enhanced Tabletop Exercise: Arizona-Sonora Border, Funded by North American Development Bank (NADB) (July 1, 2016 - July 31, 2021) (\$25,312.20), Completed, Summer 2016, CoInvestigator Kiril Hristovski (30%) with CoInvestigator Albert Brown (30%)

Training on Handling of Wastewater Containing Metals and Cyanide, Funded by Border Environmental Cooperation Commission (July 1, 2015 - June 30, 2018) (\$3,895.00), Completed, Summer 2015, CoInvestigator Albert Brown (10%)

Emergency Planning for Arizonas Energy Infrastructure, Funded by Governor's Office of Energy Policy (July 1, 2014 - June 30, 2016) (\$88,457.52), Completed, Summer 2014, CoInvestigator Kiril Hristovski (16%) with CoInvestigator Keith Holbert (16%), CoInvestigator Albert Brown (22%)

HAZMAT Emergency Response Training Institute Pilot Program, Funded by Border Environmental Cooperation Commission (July 1, 2014 - June 30, 2019) (\$8,255.80), Completed, Summer 2014, CoInvestigator Kiril Hristovski (45%) with CoInvestigator Albert Brown (10%)

Campus Public Emergency Communications Training, Funded by DHS: Federal Emergency Management Agency (FEMA) (July 1, 2011 - June 30, 2015) (\$112,230.48), Completed, Summer 2011, CoInvestigator Jeffrey Thomas (12%) with CoInvestigator Laurel Ralston (20%)

Small and inexpensive point-of-use treatment systems for simultaneous removal of arsenic and nitrate from groundwater, Funded by Border Environmental Cooperation Commission (July 1, 2009 - June 30, 2015) (\$5,033.10), Completed, Summer 2009, CoInvestigator Paul Westerhoff (10%) with CoInvestigator Albert Brown (10%)

ASU Math & Science Teaching Fellows: Toward a World-Class Teacher Workforce for Arizona Schools, Funded by Science Foundation of Arizona (July 1, 2008 - June 30, 2013) (\$52,500.00), Completed, Summer 2008, CoInvestigator Marilyn Carlson (5%) with CoInvestigator Albert Brown (10%)

Homeland Security Grant Program, Funded by Arizona Department of Homeland Security (AZDHS) (July 1, 2005 - June 30, 2012) (\$15,943.50), Completed, Summer 2005, CoInvestigator Jeffrey Thomas (10%) with CoInvestigator Albert Brown (10%)

ASU Math & Science Teaching Fellows: Toward a World-Class Teacher Workforce for Arizona Schools, Funded by Science Foundation of Arizona (July 1, 2005 - June 30, 2012) (\$157,500.00), Completed, Summer 2005, CoInvestigator Marilyn Carlson (10%) with CoInvestigator Albert Brown (15%)

Effectiveness of Microbe Application to Petroleum Spills, Funded by Norman Weiss Associates, Inc. (July 1, 2004 - June 30, 2009) (\$3,710.70), Completed, Summer 2004, CoInvestigator Albert Brown (45%)

Public Health National Incident Management System (NIMS) Training, Funded by AZ-Maricopa County: Department of Public Health (July 1, 2004 - June 30, 2009) (\$21,341.25), Completed, Summer 2004, CoInvestigator Albert Brown (35%)

### **Funded - In Progress**

Reducing ozone precursors from non-combustion sources via inherently functionalized carbon from food waste and algae , Funded by ASU LightWorks TRIF (November 23,

2020 - June 30, 2021), awarded November 23, 2020 (\$25,000.00), Funded - In Progress, Spring 2021, Other Albert Brown

Project Cities and City of Peoria, Funded by City of Peoria (August 20, 2020 - August 31, 2021), awarded November 3, 2020 (\$25,000.00), Funded - In Progress, Fall 2020, CoPI Albert Brown

FALL 2020 SEMESTER: P2-2 Placemaking: P83 "Urban Village" Visioning Project P6-2 Sustainability Planning: Public Outreach Campaign P7-1 Sustainable Waste Management P8-1a COVID-19 Response: Needs Assessment P8-1b COVID-19 Response: Communication And M, Funded by City of Peoria (August 1, 2018 - August 31, 2023), awarded December 17, 2020 (\$3,500.00), Funded - In Progress, Summer 2018, CoInvestigator Stephanie Pfirman (7%) with CoInvestigator David King (7%), CoInvestigator Meagan Ehlenz (8%), CoInvestigator Deborah Salon (14%), CoInvestigator Shirley-Ann Behravesh (7%), CoInvestigator Caroline Harrison (7%), CoInvestigator Gregory Broberg (14%), CoInvestigator Majia Nadesan (14%), CoInvestigator Albert Brown (14%)

Blended Emergency Response Exercises for Maquiladora Clusters, Funded by North American Development Bank (NADB) (December 1, 2017 - September 9, 2021), awarded March 19, 2020 (\$18,000.00), Funded - In Progress, Fall 2017, CoInvestigator Kiril Hristovski (69%)

### **Withdrawn**

Industrial Hygiene Training for Environmental Management Graduate Students, Funded by HHS-CDC: Nat Inst for Occupational Safety and Health (NIOSH) (July 1, 2008 - June 30, 2013) (\$662,950.00), Withdrawn, Fall 2007, CoInvestigator Albert Brown (10%)

### **Submitted - Not Funded**

Occupational Safety and Health Training (OSH), Funded by HHS-CDC: ERA (July 1, 2017 - June 30, 2020) (\$449,998.00), Submitted - Not Funded, Fall 2016, CoInvestigator Erin Chiou (3%) with CoInvestigator Claire Honeycutt (2%), CoInvestigator Oswald Chong (3%), CoInvestigator Jeffrey Kleim (3%), CoInvestigator Christopher Buneo (3%), CoInvestigator Nancy Cooke (10%), CoInvestigator James Abbas (2%), CoInvestigator Robert Gray (3%), CoInvestigator Kiril Hristovski (3%), CoInvestigator Stephen Helms Tillery (3%), CoInvestigator Marco Santello (3%), CoInvestigator Albert Brown (3%)

Developing a HAZMAT crisis response capacity in Macedonia and Montenegro, Funded by North Atlantic Treaty Organization (NAOT) (January 1, 2017 - December 31, 2019) (\$451,718.00), Submitted - Not Funded, Spring 2016, CoInvestigator Albert Brown (1%)

Raising Arizona/Sonora Community Awareness of Hazardous Substance Releases, Funded by US Environmental Protection Agency (EPA) (January 1, 2016 - March 31, 2017) (\$49,931.00), Submitted - Not Funded, Summer 2015, CoInvestigator Kiril Hristovski (30%) with CoInvestigator Laurel Ralston (15%)

Building Wastewater Pre-treatment Monitoring Capacity for Metal Plating Maquiladora Facilities, Funded by US Environmental Protection Agency (EPA) (January 1, 2016 - March 31, 2017) (\$73,135.00), Submitted - Not Funded, Summer 2015, CoInvestigator Laurel Ralston (5%) with CoInvestigator Albert Brown (15%)

Rapid Response and Community Education to Prevent PM-2.5 Emissions, Funded by Maricopa County Air Quality (June 1, 2014 - May 31, 2015) (\$86,402.00), Submitted - Not Funded, Spring 2014, CoInvestigator Laurel Ralston (50%)

Global Leadership Training - Panama, Funded by Michigan State University (March 1, 2014 - February 28, 2015) (\$25,424.00), Submitted - Not Funded, Spring 2014, CoInvestigator Albert Brown (10%)

Globally Harmonized System of Classification and Labelling Chemicals Training, Funded by Border Environmental Cooperation Commission (September 1, 2013 - February 28, 2015) (\$55,175.00), Submitted - Not Funded, Summer 2013, CoInvestigator Albert Brown (5%)

Environmental Education to Support Tribal Nations and to Educate Students in Environmental Courses about Environmental Management in Indian Country, Funded by US Environmental Protection Agency (EPA) (April 1, 2013 - March 30, 2015) (\$96,599.00), Submitted - Not Funded, Fall 2012, CoInvestigator Albert Brown (25%)

Utilizing STEM to Elucidate the Environmental and Emergency Management Nexus as a Tool for Addressing Present and Future Threats to Homeland Security, Funded by Department of Homeland Security (DHS) (September 1, 2012 - August 31, 2017) (\$495,289.00), Submitted - Not Funded, Spring 2012, CoInvestigator Albert Brown (20%)

Moullage Training, Funded by Arizona Department of Health Services (August 1, 2011 - July 31, 2012) (\$35,353.00), Submitted - Not Funded, Summer 2011, CoInvestigator Albert Brown (15%)

Enhanced Emergency Communications for Community, Commerce and Infrastructure Resilience, Funded by Department of Homeland Security (DHS) (January 1, 2012 - December 31, 2014) (\$480,075.00), Submitted - Not Funded, Spring 2011, CoInvestigator Kiril Hristovski (15%) with CoInvestigator Albert Brown (15%)

NEET2010, Funded by US Environmental Protection Agency (EPA) (October 1, 2010 - September 30, 2011) (\$299,994.00), Submitted - Not Funded, Summer 2010, CoInvestigator Kiril Hristovski (10%) with CoInvestigator Paul Westerhoff (30%), CoInvestigator Albert Brown (10%)

Enhanced Emergency Management Planning for Arizona State University, Funded by US Department of Education (DOEd) (October 1, 2010 - September 30, 2012) (\$749,570.00), Submitted - Not Funded, Spring 2010, CoInvestigator Kiril Hristovski (8%) with CoInvestigator Albert Brown (8%)

Enhanced Emergency Communications for Community, Commerce, and Infrastructure Resilience, Funded by Department of Homeland Security (DHS) (September 1, 2010 - August 31, 2013) (\$484,613.00), Submitted - Not Funded, Spring 2010, CoInvestigator Kiril Hristovski (15%) with CoInvestigator Albert Brown (15%)

Bi-National Hazardous, Special, Universal, and E-Waste Training for Maquiladoras, Funded by Border Environmental Cooperation Commission (October 1, 2009 - March 31, 2011) (\$63,100.00), Submitted - Not Funded, Summer 2009, CoInvestigator Albert Brown (50%)

Revolutionary Technology for Firefighter Situational Awareness, Funded by DHS: Federal Emergency Management Agency (FEMA) (August 16, 2009 - August 15, 2010) (\$995,468.00), Submitted - Not Funded, Spring 2009, CoInvestigator Jeffrey Thomas (10%) with CoInvestigator Albert Brown (4%)

ASU Citizen Corps Recruitment/Community Emergency Response Team Training, Funded by Arizona Department of Homeland Security (AZDHS) (September 1, 2009 - September 30, 2010) (\$32,596.00), Submitted - Not Funded, Spring 2009, CoInvestigator Jeffrey Thomas (10%) with CoInvestigator Albert Brown (10%)

Medical Reserve Corps Capacity Development at Arizona State University, Funded by Arizona Department of Homeland Security (AZDHS) (October 1, 2009 - September 30, 2010) (\$78,306.00), Submitted - Not Funded, Spring 2009

Introductory Nanotechnology Training for Arizona High School Science Teachers, Funded by US Environmental Protection Agency (EPA) (July 1, 2009 - June 30, 2010) (\$42,973.00), Submitted - Not Funded, Spring 2009, CoInvestigator Kiril Hristovski (80%) with CoInvestigator Robert Culbertson (2%)

ASU Citizen Health and Medical Preparedness Full Proposal FY08 CTGP, Funded by Department of Homeland Security (DHS) (October 1, 2008 - September 30, 2011) (\$1,587,743.00), Submitted - Not Funded, Fall 2008, CoInvestigator Jeffrey Thomas (5%) with CoInvestigator Albert Brown (10%)

Citizen Medical Preparedness Training, Funded by Department of Homeland Security (DHS) (October 1, 2008 - September 30, 2011) (\$1,582,053.00), Submitted - Not Funded, Summer 2008, CoInvestigator Jeffrey Thomas (5%) with CoInvestigator Albert Brown (10%)

Emergency Management Capacity Building at Arizona State University, Funded by US Department of Education (DOEd) (September 1, 2008 - February 28, 2010) (\$546,753.00), Submitted - Not Funded, Summer 2008, CoInvestigator Jeffrey Thomas (5%) with CoInvestigator Kiril Hristovski (5%), CoInvestigator Albert Brown (5%)

On-Line Courses Related to Nuclear Safeguards and Security, Funded by US Nuclear Regulatory Commission (NRC) (July 1, 2008 - June 30, 2009) (\$120,099.00), Submitted - Not Funded, Spring 2008, CoInvestigator Albert Brown (10%)

Construction and Demolition Waste Recycling Research, Funded by Arizona Department of Environmental Quality (July 1, 2008 - June 30, 2013) (\$50,252.00), Submitted - Not Funded, Spring 2008, CoInvestigator Albert Brown (50%)

Revolutionary Technology for Firefighter Situational Awareness, Funded by Department of Homeland Security (DHS) (July 1, 2007 - June 30, 2009) (\$999,869.00), Submitted - Not



Funded, Spring 2007, CoInvestigator Jeffrey Thomas (5%) with CoInvestigator Albert Brown (1%)

Campus, Teen, Business and Native American CERT/NIMS/ICS Training, Funded by Arizona Department of Homeland Security (AZDHS) (October 1, 2007 - September 30, 2009) (\$31,858.00), Submitted - Not Funded, Spring 2007, CoInvestigator Jeffrey Thomas (40%) with CoInvestigator Albert Brown (20%)

SW-ACE in GeoInt: Preparing a New Generation of Intelligence Professionals, Funded by DOD: National Geospatial-Intelligence Agency (NGA) (September 15, 2006 - September 14, 2011) (\$3,749,916.00), Submitted - Not Funded, Summer 2006, CoInvestigator Souad Ali (6%) with CoInvestigator Ramon Arrowsmith (3%), CoInvestigator Bradley Rogers (6%), CoInvestigator Kevin Gary (14%), CoInvestigator Albert Brown (1%)

### **Submitted for Review**

Hazardous Material Worker Health and Safety Training (U45), Funded by University of California: Los Angeles (UCLA) (August 1, 2020 - May 31, 2021) (\$35,000.00), Submitted for Review, Fall 2020, CoInvestigator Kiril Hristovski (95%) with CoInvestigator Albert Brown (4%)

High School Science Lab Education, Funded by Universidad de Sonora (December 15, 2019 - June 14, 2021) (\$14,636.00), Submitted for Review, Fall 2019

## **Scholarship and Publications**

### **Film Production**

Brown, A. F., Cruz, M. (2020). Workplace COVID-19 Safety Training.

Brown, A. F., Cruz, M. (2020). General Public COVID-19 Safety Training.

### **Report**

Students, ERM 401/501, & Brown, A. F. (2020). *Best Management Practices for Aboveground Storage Tanks*. (Project Cities Staff, Ed.) (p. 62). Tempe, AZ, USA: ASU GIOS Project Cities.  
[https://www.dropbox.com/s/mo6asa68ghswdop/19S\\_Glendale\\_AST\\_web\\_FINAL.pdf?dl=0](https://www.dropbox.com/s/mo6asa68ghswdop/19S_Glendale_AST_web_FINAL.pdf?dl=0)

Students, E. E. 432. 53., & Brown, A. F. (2020). *Resilient Recycling and Adapting to a Changing Market*. (Project Cities Staff, Ed.) (p. 88). Tempe, AZ, USA: Arizona State University GIOS Sustainable Cities Network Project Cities.  
[https://www.dropbox.com/s/fjirw5vm9vgcqq4/19F\\_Glendale\\_Recycling\\_web\\_FINAL.pdf?dl=0](https://www.dropbox.com/s/fjirw5vm9vgcqq4/19F_Glendale_Recycling_web_FINAL.pdf?dl=0)

Austhof, E. C., Anderson, C. L., Berisha, V., Gettel, A., Domsy, I., Brown, A. F., ... Nguyen, H. (2020). *Gap Analysis of Climate and Health Research in Arizona* (p. 15). Phoenix, AZ, USA: Maricopa County Department of Public Health.

Brown, A. F., & Olson, L. (2020). *Building Joint Advanced Capacity through Enhanced Tabletop Exercises, Border 2020 Project Final Report* (p. 10). El Paso, TX, USA: North American Development Bank.

Students, E. E. 432/532, & Brown, A. F. (2019). *Sustainability & Solid Waste*. (S. S. Project Cities Staff, Ed.) (p. 50). Tempe, AZ, USA: Arizona State University GIOS Project Cities.

## **Mentorship and Student Success**

### **Spring 2019 - Fall 2020**

Schneider, Marie, Month / Season Graduated: December, Year Graduated: 2020, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: Recycling Waste Exchanges, Completion Status: Completed, Student Level: Master's, Mentoring Role: Committee Chair - Master's, chair, Additional Faculty Involved: none,

Describe any achievements or positions the student has attained: Achieved M.S. in ERM

### **Fall 2018 - Fall 2020**

Cruz Mejia, Monica, Month / Season Graduated: December, Year Graduated: 2020, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: Chemical Release Plume Modeling, Completion Status: Completed, Student Level: Master's, Mentoring Role: Committee Chair - Master's, chair, Additional Faculty Involved: none, Describe any achievements or positions the student has attained: Achieved MS in ERM

### **Spring 2020 - Ongoing**

Bergin, Kelly, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: Chemical Spill Policy Development for Recreational Lakes, Completion Status: In Progress, Student Level: Master's, Mentoring Role: Committee Chair - Master's, chair, Additional Faculty Involved: none

Hodson, Laura, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: undetermined, Completion Status: In Progress, Student Level: Master's, Mentoring Role: Committee Chair - Master's, chair, Additional Faculty Involved: none.

### **Spring 2020 - Spring 2021**

Choksi, Juhi, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: Assured Water Supply Certification in Pinal Valley, AZ, Completion Status: In Progress, Student Level: Master's, Mentoring Role: Committee Chair - Master's, chair, Additional Faculty Involved: none, Describe any achievements or positions the student has attained: obtained internship; President of ERM Club

### **Spring 2021 - Ongoing**

Bhore, Safya, Degree Program: ERM, Student Product: Master's Applied Project Title: Climate Change and Air Pollution Correlations, Completion Status: In Progress, Student Level: Master's, Mentoring Role: Committee Chair - Master's, chair, Additional Faculty Involved: none. Describe any achievements or positions the student has attained: Safya obtained an internship; Safya was my ERM 532 Grader and will be my ERM 401/501 Grader. Safya is the Treasurer of the ERM Club.

Pandit, Ghandar, Month / Season Graduated: May, Year Graduated: 2019, Degree Program: Civil Engineering, Student's College or School: SECE, Student Product: Master's Thesis. Project Title: Environmental Fate Analysis of Landfilled Solid Waste, Completion Status: Completed, Student Level: Master's, Mentoring Role: Advisor, Additional Faculty Involved: Dr. Trevor Boyer; Dr. Larry Olson, Describe any achievements or positions the student has attained: Accepted into UC Davis Ph.D. Engineering program.

### **Fall 2018 - Ongoing**

Greenbaum, Madeline, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: PM-10 Control for Specific Soil Types, Completion Status: In Progress, Student Level: Master's, Mentoring Role: Committee Chair - Master's, chair, Additional Faculty Involved: none. Describe any achievements or positions the student has attained: Holds an air pollution control professional position at ADEQ.

### **Fall 2018 - Fall 2019**

Lemster, Elizabeth, Month / Season Graduated: December, Year Graduated: 2019, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: High School Lab Safety, Completion Status: Completed, Student Level: Master's, Mentoring Role: Committee Co-Chair, Co-chair, Additional Faculty Involved: Dr. Larry Olson. Describe any achievements or positions the student has attained: Achieved MS in ERM

Hinkle, Emily, Month / Season Graduated: December, Year Graduated: 2019, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: Agricultural Best Practices for Water Quality Protection, Completion Status: Completed, Student Level: Master's, Mentoring Role: Committee Co-Chair, Additional Faculty Involved: Dr. Larry Olson. Describe any achievements or positions the student has attained: Achieved MS in ERM

### **Spring 2018 - Ongoing**

Denetdeel, Tennille, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Applied Project Title: Uranium Mine Remediation, Completion Status: In Progress, Student Level: Master's, Mentoring Role: Committee Co-Chair, Additional Faculty Involved: Dr. Larry Olson

Hill, Gretchen, Degree Program: ERM, Student Product: Master's Applied Project Title: undetermined, Completion Status: In Progress, Student Level: Master's, Mentoring Role: Committee Co-Chair, Additional Faculty Involved: Dr. Larry Olson

### **Fall 2018 - Spring 2020**

Rangel, Adam, Month / Season Graduated: May, Year Graduated: 2020, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: Surface Water Pollution Source Investigation, Completion Status: Completed, Student Level: Master's, Mentoring Role: Committee Co-Chair, Additional Faculty Involved: Dr. Larry Olson. Describe any achievements or positions the student has attained: Achieved MS in ERM

### **Spring 2018 - Fall 2018**

Gohil, Anuja, Month / Season Graduated: December, Year Graduated: 2018, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Master's Applied Project Title: Emissions Bank Rule Development for ADEQ, Completion Status: Completed, Student Level: Master's, Mentoring Role: Committee Co-Chair, Additional Faculty Involved: Dr. Larry Olson; Nalini Chhetri. Describe any achievements or positions the student has attained: Achieved MS in ERM

### **Fall 2019 - Fall 2019**

Cherry, Hannah, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Honors Contract, Title: Editor of Student Reports, Completion Status: Completed, Student Level: Undergraduate, Mentoring Role: Advisor, Additional Faculty Involved: none

Nelson, Benjamin, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Honors Contract, Project Title: Water Supply Policy Issues in Cochise County, Arizona, Completion Status: Completed, Student Level: Undergraduate, Mentoring Role: Advisor, Additional Faculty Involved: none

Grigorio, Gisselle, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Honors Contract, Project Title: Risk Communication Best Practices, Completion Status: Completed, Student Level: Undergraduate, Mentoring Role: Advisor, Additional Faculty Involved: none. Describe any achievements or positions the student has attained: Produced a video for instructional use

### **Spring 2018 - Spring 2018**

Tyre, Kayla, Degree Program: ERM, Student's College or School: FSE/TPS, Student Product: Honors Contract, Title: Recycling Solid Waste, Completion Status: Completed, Student Level: Undergraduate, Mentoring Role: Advisor, Additional Faculty Involved: none

Schultz, Cameron, Degree Program: SOS, Student's College or School: GIOS, Student Product: Honors Contract, Title: Sustainability Literature Review, Completion Status:

Completed, Student Level: Undergraduate, Mentoring Role: Advisor, Additional Faculty Involved: none

## **University Committee Service**

### **Level 3**

#### **Spring 2018 - Fall 2019**

Awards, (Polytechnic School)

#### **Spring 2018 - Fall 2018**

TPS Faculty Senate, substitute for Kiril Hristovski during sabbatical (Polytechnic School)

## **College/School or Unit Service**

### **Spring 2020 - Ongoing**

News media interviews, (Polytechnic School)

Project Cities RFP Review Committee, (School of Sustainability)

### **Summer 2018 - Summer 2018**

FSE E2 Camp, (Ira A. Fulton Schools of Engineering)

### **Spring 2016 - Ongoing**

ERM Club Advisor, (Polytechnic School)

### **Spring 2006 - Ongoing**

ASU GIOS Sustainability Practitioner, (SOS Faculty & Researchers)

## **Service: Professional Activities**

### **Spring 2018 - Ongoing**

Arizona Environmental Strategic Alliance, Committee, Committee Title: Annual Report Committee, Role or Position: Advisor to the organization; Chair of the Committee. This is Arizona's premier environmental leadership professional association.

### **Spring 2017 - Ongoing**

Bridging Climate Change and Public Health, State of Arizona, Committee Title: Research Action Team, Role or Position: Advisor, editor, contributor. I serve as a committee

member. My duties are primarily advisory. I find and contribute relevant research articles. I assist with editing committee reports.

Publication Title : Gap Analysis of Climate and Health Research in Arizona

### **Spring 1990 - Ongoing**

Environmental Professionals of Arizona, State of Arizona, Role or Position: member. I am a member and liaison between our students and the organization.

### **Spring 1976 - Ongoing**

Arizona Public Health Association, State of Arizona, Role or Position: Past Vice President; Past Environmental Committee Chair. I am a supporting member. I provide informal advice and information.

## **Community Activities**

### **Spring 2020 - Spring 2020**

Partner or Community Group: Inter-Tribal Council of Arizona, Describe community programming or education activities: Invited speaker to a full-day seminar., Describe Your Role or Activities: I was invited to give a presentation on Climate Change and Air Pollution. Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Indigenous Nation, Mesa, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Summer 2020 - Summer 2020**

2020-07-28, End Date: 2020-07-28, Partner or Community Group: U.S. EPA, Describe community programming or education activities: Presentation to Border 2020 Executive Committee. Describe Your Role or Activities: Invited presentation of Border 2020 project.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Community at Large, Webinar, Does your unit consider this activity to be Service or Teaching?: Research

### **Fall 2019 - Fall 2019**

2019-09-13, End Date: 2019-09-30, Partner or Community Group: East Valley Institute of Technology, Describe community programming or education activities: Educating high school students. Describe Your Role or Activities: Invited presentations on Environmental and Engineering Careers

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: K-12 School, Mesa, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Fall 2018 - Fall 2018**

2018-11-08, End Date: 2018-11-08, Partner or Community Group: Arizona Department of Health Services, Describe community programming or education activities: Continuing professional development. Describe Your Role or Activities: Invited presentation on climate change and health.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Government, Phoenix, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Spring 2018 - Spring 2018**

2018-04-14, End Date: 2018-04-14, Partner or Community Group: Arizona Lung Association, Describe community programming or education activities: Full day seminar on respiratory health. Describe Your Role or Activities: Invited speaker on the topic of health effects of air pollution.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Non-profit, Phoenix, AZ, Does your unit consider this activity to be Service or Teaching?: Service

2018-02-23, End Date: 2018-02-23, Partner or Community Group: Deer Valley HS District, Describe community programming or education activities: STEM Career Day. Describe Your Role or Activities: Invited speaker on environmental challenges and careers.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: K-12 School, Location, City and State: Phoenix, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Spring 2017 - Ongoing**

2017-01-01, End Date: 2023-01-01, Partner or Community Group: Maricopa County Department of Public Health, Describe community programming or education activities: Building advocacy for managing climate change. Describe Your Role or Activities: Committee member and co-author of a special report.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Community at Large, Phoenix, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Fall 2005 - Ongoing**

2005-09-01, End Date: 2023-01-01, Partner or Community Group: Arizona Environmental Strategic Alliance, Describe community programming or education activities: Provide environmental leadership mentoring to businesses. Describe Your Role or Activities: I chair the member Annual Report Review Committee. I review the reports and lead a group of advisors during the evaluations of the reports.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Non-profit, Location, City and State: Phoenix, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Spring 2017 - Spring 2017**

2017-05-20, End Date: 2017-05-20, Partner or Community Group: International Erosion Control Association, Western Chapter, Describe community programming or education activities: Full day seminar. Describe Your Role or Activities: I was an invited presenter on two air pollution control topics.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Non-profit, Phoenix, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Spring 2016 - Spring 2016**

2016-03-18, End Date: 2016-03-18, Partner or Community Group: ASU Bob Ramsey Executive Education Center, Describe community programming or education activities: Full day professional development class. Describe Your Role or Activities: Invited guest speaker. My topic was How to Build Sustainable Communities.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: College / University, Location, City and State: Phoenix, AZ, Does your unit consider this activity to be Service or Teaching?: Service

2016-02-12, End Date: 2016-02-12, Partner or Community Group: Arizona Water Management Association, Describe community programming or education activities: Annual conference. Describe Your Role or Activities: Invited guest speaker: topic was Phoenix Boil Water Advisory Facts.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Non-profit, Location, City and State: Glendale, AZ, Does your unit consider this activity to be Service or Teaching?: Service

### **Fall 2015 - Fall 2015**

2015-09-11, End Date: 2015-09-11, Partner or Community Group: American Society of Safety Engineers, AZ Chapter, Describe community programming or education activities: Monthly meeting. Describe Your Role or Activities: Invited guest speaker: topic was Complacent or Compliant? Post 911 EH & S Professional Practice Improvements and Challenges.

Did you represent an ASU unit? If yes, which?: FSE/TPS/ERM, Partner Type: Non-profit, Tempe, AZ, Service.



## **Professional Memberships**

### **Spring 1976 - Ongoing**

Arizona Public Health Association

public health advocacy

### **Spring 1990 - Ongoing**

Environmental Professionals of Arizona

Promoting environmental compliance by regulated entities; Environmental education

Arizona Environmental Strategic Alliance

Promoting exceptional environmental performance by regulated entities.

### **Spring 2010 - Ongoing**

Sierra Club, Grand Canyon Chapter

Environmental and natural resources advocacy

### **Spring 2017 - Ongoing**

Bridging Climate Change and Health

Building coalitions for climate change management

I serve on the Research Committee.

## **Professional Development**

### **Spring 2018 - Ongoing**

Inhale Resilience Exhale Solutions, Inter-Tribal Council of Arizona 2021-02-20, End Date: 2020-02-20, Credit or CPE Hours: 7, Mesa, Arizona, One day seminar; Air pollution and climate change theme

8-Hour Water Quality Seminar, Arizona State University; Fulton Schools of Engineering 2018-02-18, End Date: 2018-02-14, Credit or CPE Hours: 8, Scottsdale, Arizona, Clean Water Act update by leading environmental attorney

Above Ground Storage Tanks, City of Glendale 2018-03-21, End Date: 2018-03-21, Credit or CPE Hours: 4, Glendale, Arizona, Improve understanding of chemical storage

### **Spring 2020 - Ongoing**

8-hour OSHA/RCRA Hazardous Waste Operations & Emergency Response, Arizona State University; Fulton Schools of Engineering 2020-05-28, End Date: 2020-05-28, Credit or CPE Hours: 8, Phoenix, Arizona, Refresher training for mandatory certification as a hazardous waste operations trainer. I teach the ASU ERM 401/501 Hazardous Waste Management class

### **Summer 2020 - Summer 2020**

Minimizing Workplace Exposures through Design and Engineering Controls, NIEHS and AIHA 2020-07-01, End Date: 2020-07-01, Credit or CPE Hours: 1.5, webinar, Workplace health and safety best practices for COVID-19 prevention

### **Fall 2020 - Ongoing**

Environmental Management Compliance Assistance, Arizona Environmental Strategic Alliance 2020-10-15, End Date: 2020-11-10, Credit or CPE Hours: 5, Phoenix, Arizona, Webinar on current environmental compliance topics

Wildfire Smoke, Mental Health and Green Cleaning-Sanitizing-Disinfection, U.S. EPA and Border 2020 2020-10-20, End Date: 2020-10-20, Credit or CPE Hours: 1.5, none, Webinar on minimizing risks from wildfire smoke and COVID-19 disinfection

ASU Sustainable Cities Network, Project Cities End of Semester Showcase, ASU GIOS Project Cities 2020-12-04, End Date: 2020-12-04, Credit or CPE Hours: 3, Tempe, Arizona, Webinar showcasing multiple ASU student project reports related to sustainability

### **Summer 2019 - Ongoing**

8-hour RCRA Refresher for HazWOpER, Arizona State University; Fulton Schools of Engineering 2019-06-27, End Date: 2019-06-27, Credit or CPE Hours: 8, Mesa, Arizona, Required OSHA/RCRA certification training for hazardous waste professionals

### **Spring 2019 - Ongoing**

Field trip to Roosevelt Dam Hydroelectric Station, Salt River Project 2019-01-21, End Date: 2019-01-21, Credit or CPE Hours: 3, Globe, Arizona, Field trip to learn more about a renewable energy source that does not generate greenhouse gases

Field trip to City of Glendale Oasis Water Treatment Plant, City of Glendale 2019-02-15, End Date: 2019-02-15, Credit or CPE Hours: 4, Glendale, Arizona, Field trip to improve understanding of the chemicals used to treat water for public consumption

### **Fall 2019 - Ongoing**

Field Trip to City of Glendale Landfill and Materials Recovery Facility, City of Glendale 2019-09-18, End Date: 2019-09-19, Credit or CPE Hours: 3, Glendale, Arizona, Field trip to understand newly emerging issues about solid waste recycling

### **Summer 2018 - Ongoing**

8-hour RCRA Refresher for HazWOpER, Arizona State University; Fulton Schools of Engineering 2018-06-19, End Date: 2018-06-19, Credit or CPE Hours: 8, Glendale, Arizona, Required OSHA/RCRA training for hazardous waste trainers and workers

## **Collaborators**

### **Spring 2018 - Ongoing**

Collaborator's Name: Elham Fini; Taylor Weiss; Peter Lammers, Collaborator's Institution / Organization: FSE/SSEBR,  
Collaboration Outcomes:

Developing test bed opportunities for newly emerging air pollution reduction construction materials

Regulatory issues advisor; Pairing scientists with policy makers;

The activity is related to a SEED grant from ASU Lightworks titled Reducing ozone precursors from non-combustion sources via inherently functionalized carbon from food waste and algae

### **Spring 1996 - Ongoing**

Collaborator's Name: ERM Professional Development Program,  
Collaboration Outcomes:

Expanding the population of customers who attend ERM Professional Development classes.

Developing and implementing new classes including EPA Method 9 Visible Emissions Observation; Pesticide Safety for Schools; Heat Stress Awareness; and Workplace COVID-19 Safety.

### **Summer 2005 - Ongoing**

Collaborator's Name: Inter-Tribal Council of Arizona, Collaborator's Institution / Organization: Inter-Tribal Council of Arizona,  
Collaboration Outcomes:

Additional student and professional development class participation from indigenous members of the population.

I continuously maintain the ERM program relationship with ITCA.

Collaborator's Name: Arizona Manufacturers Council , Collaborator's Institution /  
Organization: Arizona Manufacturers Council ,  
Collaboration Outcomes:

Increase student job and internship opportunities.

Increase student enrollment.

I maintain communications and our professional relationship.

Our ERM career fair successes show this is working.

Collaborator's Name: Multiple federal, tribal, state and local government agencies,  
Collaborator's Institution / Organization: Multiple federal, tribal, state and local  
government agencies,  
Collaboration Outcomes:

Increase student and professional development class enrollment

Increase support for grant opportunities

Increase support for academic enrichment

Increase student internship and job opportunities

I maintain communications with the government agencies.

### **Spring 2017 - Ongoing**

Collaborator's Name: ASU Sustainable Cities Network, Project Cities , Collaborator's  
Institution / Organization: ASU GIOS,  
Collaboration Outcomes:

Relevant student projects simulating an environmental consulting role

Proven public policy outcomes.

Follow up city engagement with ERM.

Multiple highly successful student projects. Cities of Apache Junction, Glendale and Peoria.