ALESIA C. FERGUSON, MS., MPH., PhD.

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EDUCATION

9/10-5/14 MPH College of Public Health, University of Arkansas Medical Sciences Focus: Health Policy and Management, Honors

6/97 – 5/03 PhD Environmental Engineering, Department of Civil and Environmental Engineering, Stanford University, Stanford, CA. Major: Environmental Engineering, Focus: Human Exposure Assessment.

- 1/95 6/97 MS Environmental Engineering, Department of Civil and Environmental Engineering, Stanford University, Stanford, CA. Major: Environmental Engineering
- 1/90 5/94 **BS**

Civil Engineering Florida International University, **Miami, FL**. Major: Civil Engineering, Professional Certification: Florida's EIT (Engineer in Training) October 1994.Honors

PROFESSIONAL EXPERIENCE

2/19-Pres Chair

Department of Built Environment, College of Science and Technology, North Carolina Agricultural and Technical State University, Greensboro, NC. Oversee Departmental Activities of Course Scheduling and Faculty Assignment for three Program of Environmental Health and Safety, Construction Management, and Geomatics, Conduct Student Advising and Transfer Evaluation, Faculty Evaluation, Program Evaluation (ABET, ACCE, SACs), Research Approval and Oversight, Labs and Classroom Organization and Upkeep, Student Recruitment and Advisory Board Communication (3 Boards).

8/18-Pres Associate Professor

Department of Built Environment, College of Science and Technology, North Carolina Agricultural and Technical State University, Greensboro, NC. Teaching, research and service in the areas of children's health, heavy metal exposure, exposure and dose modeling, healthy homes, experimental estimation of exposure factors, mathematical modeling and simulation, and industrial hygiene

8/16-Pres **Co-Chair EPA** Human Studies Review Board (HSRB) Provide independent expertise in human-health risk assessment-Term ending 8/30/2022

8/10-7/18 Associate Professor and Program Director Department of Environmental and Occupational Health, College of Public Health, University of Arkansas Medical Sciences, Little Rock, AR. Teaching, research and service in the areas of children's health, heavy metal exposure, exposure and dose modeling, experimental estimation of exposure factors, mathematical modeling and simulation, and occupational exposures. Manage Masters Program since 8/15.

8/04–7/10 Assistant Professor Department of Environmental and Occupational Health, College of Public Health, University of Arkansas Medical Sciences, Little Rock, AR. Teaching, research and service in the areas of children's health, exposure and dose modeling, experimental estimation, mathematical modeling and simulation, and occupational exposures

5/03-7/04 **Post-Doctoral Research Scholar Stanford University Civil and Environmental Engineering Department, Stanford, CA.** Environmental Protection Agency's modeling project focused on the development of longitudinal aggregate and cumulative exposure and dose for pesticides and other harmful chemicals. Numerical modeling of mass transfer through the skin.

1/95 – 4/03 **Graduate Research Assistant Stanford University Civil and Environmental Engineering Department, Stanford, CA.** Utilized methodologies and software applications to assess children's micro-level activity patterns, defined children's activities leading to increased exposure to environmental contaminants (e.g., mouthing behavior, outdoor lawn activities), and quantified exposure levels to enable more informed decision-making by regulators and consumer product companies on the impact of product usage on humans. Responsibilities include managing team, drafting status reports, proposal preparation, and leading status update meetings with sponsors. *Major sponsors include: Research Triangle Institute, Conglomerate of Pesticide Companies (Outdoor Residential Exposure Task Force, Environmental Protection Agency, and the Center for the Health Assessment of the Mothers and Children of Salinas.*

4/01-6/03 **Teaching Assistant & Lecturer Stanford University Civil and Environmental Engineering Department, Stanford, CA**. CE 178/276, *"Introduction to Human Exposure Analysis"*. Taught class periods and labs on methods for quantifying human activity patterns relevant for exposure assessment and mathematical models for estimating exposure and percutaneous absorption'. Also Teaching Assistant in Aquatic Chemistry Lab.

 3/98-6/98 Volunteer Research Assistant Southern Africa Environment Project, Cape Town, South Africa. Attended conferences in the northern region (e.g., Pretoria) in order to prepare information on the environmental shortfalls and needs in Southern Africa.
9/93-12/94 Undergraduate/Graduate Research Assistant: Lehman Center for Transportation Research, Department of Civil and Environmental Engineering, Florida International University, Miami, FL. Developed a decision support matrix mapping various transportation modes against economic, strategic and socio-political requirements for use by Florida Transportation Department. Advisor: Dr. Fang Zhao

ADDITIONAL TRAINING/CERTIFICATIONS

LEAD TRAINING AND OTHER CERTIFICATIONS

- 2018 Lead Renovator Re-Certification #R-I-99273-18-01976/ (through Pro-Active Safety Services
- 2018 Re- Certification, Healthy Homes Specialist Certification with the National Healthy Homes Center
- 2016 Healthy Homes Specialist Certification with the National Healthy Homes Center
- 2014 Completed training requirements for trainer with the National Healthy Homes Center
- 2010 Dust Sampling Technician # DST-I-19029-10-00001, Training New York City
- 2010/2015 EPA RRP Initial Trainer Certification #NAT-RV-I-73222-1-EN/
- 2010/2015 EPA RRP Refresher Trainer Certification #NAT-RV-R-73222-1-EN/
- 2010 Lead Abatement Worker # WO 10/01/25-8974, Training St Louis Missouri
- 2009 Train the Trainer, Additional 8-hr Lead Training, Alliance Alert, Boston
- 2008 Lead Safe Work Practices, 8-hr Training, November, Little Rock, Arkansas Department of Human Services OTHER
- 2007 Applied Logistic Regression Analysis, 1 day course presented by David Hosmer, Little Rock, AR.
- 2005 Audited Advanced Toxicology, Fall Course, Department of Pharmacology and Toxicology, Course Director, Dr. Lee Ann MacMillan
- 2005 Audited Biostatistics II, Spring Course, College of Public Health, Course Director Dr. Keith Williams

UNIVERSITY ROLES/BOARDS/COMMITTEES

North Carolina Agricultural and Technical State University (NCAT)

9/19-Pres: Tri-Chair of University Graduation Committee (Provost Appointed)

9/19-Pres:Technology Chairs Seminar-Organize and Invite Speakers

Invited Speaker, Nov 15th, 2019 Francis de Los Reyes, Professor NC State

8/15/20 to 5/1/20: NC TRACS Reviewer-Promoting Translational Collaborations across NC Universities 3/01/21: Chair-Search Committee-NCAT Chair for Biology Department

3/01/21: Search Committee-NCAT Director for Center for Entrepreneurship and Innovation

6/23/20: Search Committee-Vice Provost for Strategic Planning (Provost Appointed)

6/15/19 to Pres: Co-Chair of University Chairs Council-Refine and Improve Campus Activities.

10/18-1/19-Departmental ABET EHS accreditation activities as Faculty: successful attainment of

accreditation, activities to address future concerns (Before becoming Chair).

University of Arkansas Medical Sciences (UAMS)

- UAMS College of Public Health Academic Standards Committee, December 2016 to July, 2018
- UAMS College of Public Health, Admissions Committee, October 2016 to July, 2018
- University of Arkansas for Medical Sciences (UAMS), Research Shared Services/Sponsored Programs Administrative Network Advisory Board, Fall 2015 to July, 2018
- University of Arkansas for Medical Sciences, Academic Senate, At Large Committee member, April 2017 to July, 2018
- University of Arkansas for Medical Sciences, Academic Senate, President Elect, President, and Past President Spring 2014 to Spring 2017
- College of Public Health, Environmental and Occupational Health MPH and Certificate Program Director, Fall 2013 to July, 2018.
- College of Public Health Community Engagement Committee, summer 2010 to July, 2018
- College of Public Health Diversity Committee, January 2012 to July, 2018
- College of Public Health Dr.PH. Leadership Committee, Spring 2013 to July, 2018
- College of Public Health, Health Policy and Management Faculty Search Committee, Dec 2013March 2014
- College of Public Health, Grant Administrative Search Committee, April 2014-May 2014
- Graduate Council
 - a. Graduate Faculty Council Chair, August 2012 to 2014
 - b. Joint UALR and UAMS bioinformatics committee, 2012
 - c. Representative, Summer 2010 to 2014
- Academic Senate Member, Summer 2011 to Spring 2012
- College of Public Health Fall Orientation Field Project Committee, Spring-Summer, 2012, Winter 2013 (Survey Delivery to Community-U-tube video available)

COMMUNITY ADVISORY PANELS/BOARDS

- Pew Foundations (& Robert Woods Johnson) HIA Grant-Housing (PI: Neal Sealy), Advisory Board, November 2016 to July, 2018
- Arkansas National Wonders Partnership Council for Children's Health, Council Member, May 2016 to July, 2018
- Pulaski Technical School Weatherization Center, Advisory Board, August 2012 to June 2016
- Pulaski Technical School Weatherization Center, Trainer for the New Healthy Homes Center, 2014 to 2016
- Village Commons Board of Directors, Environmental Focus for Arkansas Communities, Fall 2009 to 2011, Board of Advisors, 2012- July, 2018
- Arkansas State Board Member, HIPPY (Home Instruction for Parents of Preschool Youngsters (HIPPY)), 2008 to 2013
- Union Pacific Community Advisory Panel of Central Arkansas (UPCAP), 2007-March 2015 o Also Union Pacific Planning Advisory Panel, Oct 2012 to March 2015

HONORS and AWARDS

- Faculty Induction into Delta Omega, Honorary Society of Public Health, 2017
- UAMS Fay Boozman College of Public Health Faculty Public Service Award, 2016
- Honors Graduate: MPH Program Study in Health Policy and Management, 2014
- Scholarship to 2012 Minority Faculty Development Workshop: Engineering Enterprise and Innovation: National Institute for Faculty Equity (note: could not attend)
- Scholarship to the National Science Foundation 'Retreat for Promising Minority Engineering Faculty', October, Washington D.C., 2004

- Outstanding Student Paper and Presentation, International Joint Conference for the Society for Risk Analysis and the International Society of Exposure Analysis, New Orleans, 1996
- National Science Foundation (NSF) Graduate Research Fellowship, 1995-98
- Stanford Graduate Minority Fellowship, 1995
- National Dean's List, 1994
- Who's Who among Students in American Universities and Colleges, 1994-95
- Order of the Engineer, 1994
- Engineer in Training Examination (EIT), 1994
- Dean's List at Florida International University (5 semesters, 1992-94)
- United States Achievement Academy, 1993
- NCC Table Tennis First Place Intramural Champion, NY, 1990

Submitted NCAT Grant Activity, 2018-2021

NSF Engineering Research Center

<u>Title:</u> NSF Engineering Research Center for OneWASH (One Water, Sanitation, and Health) with Underserved Communities

Lead PI: Francis L de los Reyes (NC State): PIs: Alesia Ferguson (NCAT), James Mehelcic (USF), Qiong Zhang (USF), and Mathew Verbyla (SDSU)

Funding \$26,000,000, NCAT funding: \$3,700,000, Submitted May 2021. Jan 2022 (next round site visit)

National Institute of Health

Title: Pesticide Exposures for Communities in the Delta Lead PI: Igor Koturbash (UAMS), CoPi: Alesia Ferguson (NCAT) Funding: \$3,700,000, NCAT Funding: \$530,000 Submitted October 2020

Kellogg Foundation

<u>Title:</u> STRONG: Sustaining Technology Readiness for Opportunities and Nurturing Generations.

Pls: Ahmidouch, Ferguson, Childress, Zhou, Cockerham

Funding 20,000,000 Pre-Proposals: Not Invited

NCAT-NSF-HBCU-UP Internal STEM Infusion Projects

<u>Title</u>: Enhancing STEM student performance in undergraduate Built Environment Programs: Quantitative and technology educational and research interventions for students **PI: Alesia Ferguson, CoPI: Dongyang Deng, Mohammed Mawlana and Jerry Nave, Not funded**

NC Policy Collaborator: COVID 19 Research Projects

Title: COVID-19 Surveillance in Campus Built Environment COVID-19 Research Projects PI: Grace Byfied, CoPis: Mohd Anwar Dongyang Deng, Liesl Jefferson, Alesia Ferguson, Raymond Samuel Submitted May 2020 Funding \$300, 000, Not funded

National Institute of Health (NIEHS)

Title: Spatial-Temporal MultiScale Analysis and Influence of Key Environmental Stressors on COVID19, Grants Tracking# Grant1309088 PI: Alesia Ferguson and Leila-Hashemi Beni, Co-Pis: Stephanie Teixeiria-Poit and Parisa Kordjamshidi Submitted May 1rst, 2020 Budget: \$389,000, Not Funded

National Science Foundation

Title: Swift-MC Center Grant Preproposal Submitted January 19th, 2019 Project Leader Francis de los Reyes of NC State University (4 institution involved) NCAT PI: Alesia Ferguson No Budget: Invited for Full Proposal

National Academy of Science, Engineering and Medicine (NASEM)

Title: Influence of Beach Morphology and Storms on Contaminant Accumulations and Beach Exposures Letter of Intent Submitted May 22nd 2019 Project PI: Helena Solo Gabriele: University of Miami (UM) My Role: PI for NCAT Not in Ramses, submitted through UM Budget Total: Not Requested this Round, Not funded

Z Smith Reynolds Foundation

Title: IDEAL HOPE: Innovative Development of Education for the Advancement of Healthy Living through Occupational Partnerships and Enterprises.

Letter of Intent Submitted 12/03/2018 to Community Based Strategy, Collaborative Problem Solving PI: PI, Alesia Ferguson, CoPI: Emmanuel Obeng-Gyasi, Mohammed Mawlana Budget Total \$588,248, Not Invited

EXTRAMURAL FUNDED PROPOSALS, NCAT

Environmental Protection Agency, EPA-G2020-STAR-D1

<u>Title:</u> Soil/Dust Ingestion for Children: A Modeling and Data Collection Approach Based on Regional and Sociodemographic Differences:

<u>PI:</u> Alesia Ferguson, CoPIs: Paloma Beamer (Arizona), Helena Solo-Gabriele (Miami) Grant Dates, June 1 2021 to May 31rst, 2021

Funding: \$1,349,000,

National Science Foundation: (RAPIDS #2028811)

Title: Decision-Making Processes in STEM students during and after Pandemics PI: Andrea Ofori-Boadu, CoPIs: Alesia Ferguson and Angela White Budget: \$199,000 Period: May 15th, 2020 to December 30th, 2021

National Science Foundation

Title: Swift-MC Center Grant NRC Planning Grant Funded June 2019 Project Leader Francis de los Reyes of NC State University (5 institution involved) NCAT PI: Alesia Ferguson Budget Total: 100K funded entirely for planning grant activities through NC State

Gulf of Mexico Research Initiative

Title: Beach Exposure And Child HEalth Study (BEACHES) Grant# RFP-VI- G231817 Project Period: Jan 2018-Dec 2019 Funding Total; \$1,000,000, NCAT portion, \$300,000 Grant: PI: Helena Solo Gabriele (University of Miami): PI Alesia Ferguson (University of North Carolina): PI Kristi Mena (UTHealth) **NCAT Principal Investigator: Ferguson, Percent Effort 16-20%**

Previously Funded Grant at Other Institutions, UAMS and Stanford University

Environmental Protection Agency (EPA)

Title: Pest Management Practices and Chemical Use Reduction in Homes: Partnering with Arkansas STEM Centers in the Use of Liberating Structures Grant #: EPA NE-00F65601-0 Project Period: 2013-2015, Funding \$280,000 with match (From EPA \$218,000) **Principal Investigator, Percent Effort: 22%**

Environmental Protection Agency (EPA)

Title: HIPPY for Healthy Homes Grant #: EPA XA – 00F59601-0 Project Period: 2012-2015, Funding \$50,000 **Principal Investigator, Percent Effort: 5%**

New Mexico Department of Health (NMDOH)

Assessment of Land-based Sources of Air Quality Contaminants in the Binational Border Region of Southwestern New Mexico and Northwestern Chihuahua Project Period: 2012 to 2013, Funding \$93,000 **Co-PI, Percent Effort: 4%**

Environmental Protection Agency (EPA)

Title: Arkansas People Participating in Lead Education (APPLE): Data Gathering and Database Development, EPA Targeted Grants Grant # EPA: X8: 00f10401-0 Project Period: 2010-2012, Funding \$99,751 **Principal Investigator, Percent Effort: 10%**

Environmental Protection Agency, OPPT-08-003A,

Title: "Arkansas People Participating in Lead Awareness (APPLE) Grant # EPA AB 83405701-0 Budget Period: 2008-2010, \$246,000 **Principal Investigator,** Percent Effort: 30% first year, 10% second year

US Department of Health and Human Services

Title: Scholarships for Disadvantaged Students Award HRSA Grant No. T08HP07209-01-00, CFDA: 93.925,

Budget Period: 07/01/2006 - 06/30/2007, \$12,562 **Principal Investigator** Scholarships grant Awarded to Everret Elango, MPH Candidate.

National Institute of Health

Title: Engaging at-Risk Youth in Physical Activity and Health Improvement: Feasibility Analysis of the iPod Sports Kit and Digital Feedback." Budget Period: 2007 to 2008 **Consultant**, Percent Effort: 5%

Environmental Protection Agency, EPA-STAR GRANT

Title: Estimating Longitudinal Aggregate and Cumulative Exposure and Intake Dose for Young Children"

Budget Period: 2001-2004. Full Student Support

Lead Writer on Grant as PhD Candidate, Model Developer, Activity Pattern Analysis Advisor: Dr. James Leckie

United Parcel Service (UPS)

Title: "A Physical-Stochastic Model that uses Children's Micro-Level Activity Time Series to Calculate Aggregate and Cumulative Human Exposure and Dose to Environmental Toxins in the Urban Environment Budget Period: 2001-2004. Full Student Support Lead Writer on Grant as PhD Candidate, Modeler, Activity Pattern Analysis Advisor:

Dr. James Leckie

FUND GENERATION/SALARY COVERAGE

Ferguson, A. Training of over 1200 contractors, Landlords, Property Managers, etc. under EPA Renovation, Repair and Painting Rule, May 2010 to July, 2018. Fund generation: \$180,000 Percent Effort: Variable 5-20% per month

INTRAMURAL FUNDED PROPOSALS (UAMS)

UAMS Translational Research Institute

Projected Impacts of Climate Change on Respiratory and Cardiovascular Health in Arkansas Period, 2013-2014 **Co-Pi, Alesia Ferguson 7.5%**

CCTR Clinical and Translational Funding Opportunity through Arkansas AHECs

Title: "Investigating Cadmium Exposures in a Pediatric Patient Population Budget Period: 2010-2011, \$50,000 **Co-Principal Investigator, Alesia Ferguson, Exposure Assessor** Principal Investigator: Dr. Richard Aclin, Fort Smith AHEC

Arkansas Biosciences Institute, ABI-TOBACCO FYO5, ORSP# 28541

Title: "In Vitro Determination for the Adhesion of Pesticides and Soils to the Human Skin Budget Period: 2004-2007, <u>*Two Separate Year Awards*</u>, Total \$178,000 **Principal Investigator: Alesia Ferguson**

UAMS Medical School, Medical Endowment Award

Title: Assessing the Occupational Dermal and Inhalation Activities of Hairstylists Budget Period: 2005-2007, Funding \$15,000 **Principal Investigator, Alesia Ferguson**

PUBLICATIONS

Dissertation

Ferguson A. (2003) "Estimating Percutaneous Absorption Using Micro-Level Activity Time Series", **PHD Dissertation. Stanford University**

Modeling and analysis methods to enable more precise human health risk assessment by characterizing children's micro-level activity time series data (using videotaping and computer video translation technologies), and quantifying chemical mass uptake into the skin (by defining relevant skin characteristics and mass transfer processes). Developed and utilized database and software applications to facilitate data analyses. Development of a two-layer, time varying numerical diffusion model for human skin.

Book Chapters

- Pathogenic Fungi in Public Places, Information Gaps in Assessing Public Health Risk, SoloGabriele, H., Gorden, B., and Ferguson, A. Environmental Mycology in Public Health Submitted to Editors (Viegas, C., Pinheiro, V., Sabino, R., Viegas, S., Brandaoe, J., and Verissiomo, C.), Elsevier Publication, August 2015
- 2. **A.C. Ferguson**, R. Canales, J.O. Leckie, (2006) "Dermal Exposure and Dose," *Exposure Analysis*, Eds. Ott, W., Wallace, L., and Steinman, A., Taylor & Francis Group, CRC Press, Catalog #L1663.

In Process Peer-Reviewed Journal Articles

- Meeting the Water and Sanitation Challenges of Underbounded Communities, Wells, E. Christian; Vidmar, Abby; Webb, W. Alex; Ferguson, Alesia; Verbyla, Matthew; de los Reyes III, Francis; Zhang, Qiong; Mihelcic, James, Submitted to Environmental Science & Technology Manuscript ID: es-2021-07917m, December 2021
- 2. The Impact of COVID-Induced Extraneous Load on STEM Students' Decision-Making Processes, Angela M. White, PhD Lauryn Bethea Andrea Ofori-Boadu, PhD Alesia Ferguson, PhD, Submitted to Journal of Learning and Education, Dec, 2021
- Larissa Montas¹, Shouraseni Sen Roy², Alesia C. Ferguson³, Kristina D. Mena⁴, Helena M. Solo-Gabriele¹ and Naresh Kumar^{5*} Assessing AOD and Ground-Based Measurements to Evaluate Coastal Air Quality Impacts of the DWH Oil Spill. Submitted to Marine Pollution Bulletin, Jan 2022
- 4. Christopher Yates and Alesia Ferguson, COVID19: Dangerous Homes, Stay at Home and Legal Issues (2021). Law Journal to be Determined.
- 5. Foluke Adelabu, Alesia Ferguson, Kristina Mena, Helena Solo-Gabriele (2020) Activity Patterns for Children: Results from VideoData, Surveys and Adherence Experiments, IJERPH Nov 2021

Published Peer-Reviewed Journal Articles

- Helena M. Solo-Gabriele,*, Tom Fiddaman, Cecilie Mauritzen, Cameron Ainsworth, David M. Abramson, Igal Berenshtein, Eric P. Chassignet, Shuyi. Chen, Robyn N. Conmy, Christa D. Court, William K. Dewarl, John W. Farrington, Michael G. Feldman, Alesia C. Ferguson, Elizabeth Fetherston-Resch, Deborah French-McCay q, Christine Hale r, Ruoying He s, Vassiliki H. Kourafalou f, Kenneth Lee t, Yonggang Liu d, Michelle Masi u, Emily S. Maung-Douglass v, Steven L. Morey w, Steven A. Murawski d, Claire B. Parisf, Natalie Perlin x, Erin L. Pulster d, Antonietta Quigg y, Denise J. Reed z, James J. Ruzicka aa, Paul A. Sandifer, John G. Shepherd, Burton H. Singer, Michael R. Stukel, Tracey T. Sutton, Robert H. Weisberg, Denis Wiesenburg, Charles A. Wilson ah, Monica Wilson, Kateryna M. Wowk, Callan Yanoff, David Yoskowitz, *Towards Integrated Modelling of the Long Term Impacts of Oil Spill Impacts*, Accepted Marine Policy, May 2021
- Altomare, T.; Tarwater, P.M.; Ferguson, A.C.; Solo-Gabriele, H.M.; Mena, K.D. Estimating Health Risks to Children Associated with Recreational Play on Oil Spill-Contaminated Beaches. Int. J. Environ. Res. Public Health 2021, 18, 126. <u>https://doi.org/10.3390/ijerph18010126</u>
- Paul Sandifer and Landon Knapp; Ann Hayward Walker; Melissa Finucane; Helena Solo-Gabriele and Alesia Ferguson; Melissa Partyka; Katya Wowk, David Yoskowitz, and Rex Caffey (Gulf of Mexico Researchers) (2020): Chapter 13: Human Health and Socioeconomic Effects of the DHW Oil Spill in the Gulf of Mexico (GoM) Region, Accepted to Oceanography Special Issue Spring 2021.
- Ferguson, A.; Dwivedi, A.; Adelabu, F.; Ehindero, E.; Lamssali, M.; Obeng-Gyasi, E.; Mena, K.; Solo-Gabriele, H. Quantified Activity Patterns for Young Children in Beach Environments Relevant for Exposure to Contaminants. Int. J. Environ. Res. Public Health 2021, 18, 3274. https://doi.org/10.3390/ijerph18063274
- Hanna Perone, Kyra Rattler, Alesia Ferguson, Kristi Mena, Helena Solo-Gabriele, Analysis of Methods to Determine Hand Surface Area of Children Less than 6 Years Old: a case study, Environmental Geochemistry and Health, 2020, <u>https://doi.org/10.1007/s10653-020-00699-9</u>
- 6. Junfei Xia; Wei Zhang; Alesia C. Ferguson; Kristina D Mena, PhD; Tamay M. Özgökmen, PhD A novel method to evaluate chemical concentrations in muddy and sandy coastal regions before and after oil exposures, Environmental Pollution, 2020.
- Tomenchok LE, Gidley ML, Mena KD, Ferguson AC, Solo-Gabriele HM. Children's abrasions in recreational beach areas and a review of possible wound infections. *Int J Environ Res Public Health*. 2020. doi:10.3390/ijerph17114060
- 8. **Ferguson, A**., Kumar Dwivedi, A., Ehindero, E., Adelabu, F., Rattler, K., Perone, H.R., Montas, L., Mena, K., and Solo-Gabriele, H. (2020b) Soil, hand, and body adherence measures across four beach areas: Potential influence on exposure to oil spill chemicals. *International Journal Environmental Research and Public Health*, *17*, 4196.

- Ferguson, A., Rattler, K., Perone, H., Dwivedi, A., Obeng-Gyasi, E., Mena, K., and Solo-Gabriele, H. (2020c) Soil–skin adherence measures from hand press trials in a Gulf study of exposures. *Journal of Exposure Science Environmental Epidemiology*. <u>https://doi.org/10.1038/s41370-020-00269-2</u>
- 10. Junfei Xia, Wei Zhang, Alesia Ferguson, Kristina Mena, Tamay Ozgokmen and Helena Solo-Gabriele. Use of Chemical Concentration Changes in Coastal Sediments to Compute Oil Impact Dates, Fall 2019, Environmental Pollution, 259: 113858: <u>https://www.researchgate.net/publication/338156400_Use_of_chemical_concentration_changes_in_coastal_sediments_to_compute_oil_exposure_dates_</u>
- 11. Larissa Montas, MS; Alesia C Ferguson, PhD; Kristina D Mena, PhD, and Helena M Solo Gabriele, PhD, 2019 Categorization of nearshore sampling data using oil slick trajectory predictions, Jan 2020 Marine Pollution, 150:110557: https://www.sciencedirect.com/science/article/pii/S0025326X19307258
- 12. Alesia Ferguson, Kristina Mena, and Helena Solo-Gabriele "Assessment for Oil Spill Chemicals: Current Knowledge, Data Gaps, and Uncertainties Addressing Human Physical Health Risk" Marine Pollution, 2020, 110746 <u>https://doi.org/10.1016/j.marpolbul.2019.110746</u>
- 13. Alesia Ferguson, Courtney Del Donno, Emmanuel Obeng-Gyasi, , Kristina Mena, , Tanu Kaur Altomare Rosalie Guerrero, Maribeth Gidley, Larissa Montas and Helena SoloGabriele^{3.} Children Exposure-Related Behavior Patterns and Risk Perception Associated with Recreational Beach Use, International Journal of Environmental Research and Public Health (IJERPH), 2019, 16(15): 2783; doi.org/10.3390/ijerph16152783
- 14. Karen Yeary; Xiaofei Chi; Shelly Lensing; Hannah Baroni; **Alesia Ferguson**; Joseph Su; Paul Estabrooks; Deborah Tate; Laura Linnan. "The Wellness Lane: Use of Mixed methodology to Examine Body Weight, Health Behaviors, Psychosocial Factors, and Environmental Context Among School Bus Drivers, Preventing Chronic Disease, January 2019, PCD-18-0413.R2
- 15. Ferguson A. Editorial on "Housing and Health: Finding Innovative Solutions to Improve the Quality and Condition of the Home" to Frontiers in Public Health, Published Jan 15th, 2019, https://doi.org/10.3389/fpubh.2018.00386
- Ferguson, A. Black, J., Sims, I., Welday, J., Elmir, S. Goff, E., Higginbotham JM, Helena M. Solo-Gabriele, H. "Risk Assessment for Children Exposed to Arsenic on Baseball Fields with Contaminated Fill Material." International Journal of Environmental Research and Public Health, 2018, 4(15): 1 doi: 10.3390/ijerph15010067.
- Willis, N., Phillips, M., Ryan Bursac, Z. and Ferguson, A. "The Variability of Habitability Laws Nationwide and Relationship to State Demographics". International Journal of Housing Policy, Published online Nov 7, 2017, Page 1-27: <u>https://doi.org/10.1080/19491247.2017.1386387</u>
- Ferguson, A., Penny, R. and Solo-Gabriele, H., "A Review of the Field on Children's Exposure to Environmental Contaminants: A Risk Assessment Approach" International Journal of Environmental Research and Public Health, 14(3) 2016, doi: 10.3390/ijerph14030265

- Ferguson, A., and Solo-Gabriele, H. "Children's Exposure to Environmental Contaminants: An Editorial Reflection of Articles in the IJERPH Special Issue Entitled, "Children's Exposure to Environmental Contaminants" Journal of Environmental Research and Public Health, *13*(11), 1117; 2016, doi:10.3390/ijerph13111117
- Willis, N., Phillips, M., Ryan, K., Bursac, Z., and Ferguson, A. "Examining the Strength of State Habitability Laws across the United States." International Journal of Housing Policy, published online Jan 23rd, 2017, <u>http://dx.doi.org/10.1080/19491247.2016.1270609</u>.
- Black, J., Welday, J., Buckley, B., Ferguson, A., Gurian, P., Mena, D., Solo-Gabriele, H. "Risk Assessment for Children Exposed to Beach Sands Impacted by Oil Spill Chemicals", submitted to Journal of Environmental Research and Public Health, Vol. 13 (9): 853, 2016, doi:<u>10.3390/ijerph13090853</u>.
- 22. Ferguson, A. and Yates C. "Federal Enactment of Healthy Homes Legislation in the United States to Improve Public Health", A Perspective in Frontiers in Public Health, 24 March 2016, http://dx.doi.org/10.3389/fpubh.2016.00048
- Ferguson, A. "Methodologies and Results of a Two -Year Project Focused on Promoting Integrated Pest Management and Chemical Use Reduction to Promote Science and Improve Health." International Journal of Engineering Research and Science (IJOER), 2(4): 127-137, 2016, ijoer.com/Paper-April-2016/IJOER-MAR-2016-2.pdf [ISSN: [2395-6992]).
- 24. **Ferguson, A.** Yates. C., and Tilford, M. Value Based Insurance Design in the Treatment of Mental Health Disorders, the American Journal of Managed Care, 22(1): 65-71, 2016. http://www.ajmc.com/journals/issue/2016/2016-vol22-n1/Value-Based-Insurance-Designsin-the-Treatment-of-Mental-Health-Disorders
- Ferguson, A. Burroughs-Ray, D, and Simpson, N. "HIPPY for Healthy Homes Program: Results of Pre and Post Surveys Addressing Indoor Air, Quality Contaminants in Homes." Journal of Community Medicine and Health Education, 5:5 <u>http://dx.doi.org/10.4172/21610711.1000368</u>, 2015.
- Ferguson, A., Ulmer, R., Harris, K., Richison, A., and Kavouras, I. "Applying Liberating Structures to Improve Teaching: Pilot Study Results, Journal of Health Education Research and Development, 3:3 http://dx.doi.org/10.4172/2380-5439.1000136, 2015.
- 27. Koturbush, I., Racine Miousse, I., Lumen, A., Chalbot, M., **Ferguson, A**., and Kavouras, I., Transposable Elements in Response to Environmental Stressors, Mutation ResearchReviews, 765, 2015, 10.1016/j.mrrev.2015.05.003.
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- 15. A 3D-Fate and Transport Model Explains Measured Changes in PAH Concentrations from Weathered Oil. Session, Larissa Montas, Alesia Ferguson, Kristi Mena, Helena-SoloGabriele, Session, Modeling for Synthesis – Integrated assessment of ocean environment, ecosystems, human health, and socio-economics, Gulf of Mexico Oil Spill and Systems Science Conference, Tampa, Feb 2020, Oral Presentation
- 16. Application of Risk Assessment Modeling for Chemicals Found in Shoreline Contamination from an Oil Spill, Tanu Altomare, Patrick Tarwater, Kristi Mena, **Alesia Ferguson**, Helena Solo-

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- 64. **A.C. Ferguson**, (1994) "Tire Derived Fuel," *1994 ASCE Southeast Regional Student Competition*, Tuscaloosa, Alabama, March.

Other NCAT Activities

- Chairs ALP Group 3 Committee-Lead Work on Graduate Enrollment Growth-Developed Presentation (Forest Forrester will present to Chancellor and Deans June 10th)
- Outstanding Panelist-AEC-Professional Development Program-2020-2021-Principal Investigator Andrea-Ofori-Boadu
- Short Talk for Professional Video on the <u>Launch of Women in Design and Advanced</u> <u>Manufacturing Academy (CEPDAM)</u> to Support feature of Dr. Ofori-Boadu, March 2021
- Professional Development Expert Series webinar Session Speaker: Title: Setting Priorities, October 2020
- Biology Orientation II Speaker (BIOL205), Monday, September 14, 2020: Topic: Exploring other Science Fields
- Organizing Online Graduation Events for Built Environment Department: December 2020 and May 2021 due to COVID circumstances.
- o Committee, Fall 2020 College of Science and Technology Talent Show
- Ferguson, A. Graduate College Expert Speaker Series, Managing Stress and Priorities, Virtual, October 27th, 2020
- Alesia Ferguson , N.C. A&T Magazine article on women in STEM, featured research work, Jan 2020
- Ferguson, A. Donors Event Speaker-Encourage Support for Donations October 2019 Event
- Ferguson, A., Speaker-Gamma Chapter Founders Day Event, November 12th, 2019-Careers and Challenges in Teaching
- CMAA 4th Annual Construction Symposium, "Agility", Thursday Nov 14th, Preston Club, Cary, NC
- o Connect for Success NC Tuesday Nov 19th, Booth, Networking for Program

NATIONAL ACTIVITIES

Workshop and Seminars

GoMRI Core 7 Synthesis: Participant; Human Health Risk Virtual Session Discussion Follow-up, June 11, 2019

GoMRI Core 7 Synthesis: Human Health Virtual Session: Invited Presenter, Title: Modeling Human Physical Health Risk, May 2019: Presentation Found at

http://gulfresearchinitiative.org/gomrisynthesis/workshops-events/core-are-7-integrated-linkedmodeling-system/

NC State Global Wash Cluster, Mix and Match Water, Research Interest Presentation. Title; My Interest and Expertise in Water Exposure and Risk Assessment. NC State University 3/5/2018.

Swift-MC Workshop Participant, Grant Discussion, NC State University, 3/6, 2019, Multiple Universities

Online Seminar Participant: Responding to oil spills: Nearshore and Beach Habitats", Nov 7th, SeaGrant Research Program, https://gulfseagrant.org/responding-to-oil-spills-nearshore-beachhabitats/, 2017.

Online Seminar Participant: Responding to oil spills: Coastal wetland habitats", Oct 26, SeaGrant Research Program, <u>https://gulfseagrant.org/responding-to-oil-spills-coastal-wetland-habitats/</u>, 2017.

Workshop Participant: National Academy of Science Workshop: Preparing for a Rapid Response to Major Marine Oil Spills: A Workshop on Research Needs to Protect the Health and Well-being of Communities, held August 2-3, 2017 in Washington, DC.

Session Organizers

Ferguson, A., Kristina Mena, and Helena Solo-Gabriele, Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, February 2019-Session 9: Risk Assessment to Oil Spill Chemical, Publication Report Writeup for Session 9 found at:

http://gulfresearchinitiative.org/wpcontent/uploads/2019_GoMOSES_ReportFinal.pdf (see page 11)

Osofsky, Hayward-Walker, A., Brown, L., **Ferguson, A.**, Solo-Gabriele, H., Finucane, M., and Hobor, G., Human Dimensions and Activity of Oil Spill Response, Restoration, and Future Preparedness: Interdisciplinary Communication and Resilience from a Social Ecological and Systems Approach, Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, February 2017: Publication Report:

http://gulfresearchinitiative.org/wpcontent/uploads/2017_GoMOSES_Report_FINAL.pdf, Session (Page 29)

Journal Reviews and Editor Roles

- Reviewer, Nature Sustainability, 2021
- Reviewer, Journal of Exposure Science and Environmental Epidemiology, 2021
- Associate Editor, International Journal of Environmental Research and Public Health, September 2016 to Present
- Associate Editor, Frontiers in Environmental Health, September 2015 to Present
- Research Square Reviewer, 2017 to Present
- Marine Pollution Bulletin, January 2020 Reviewer
- Editor, Special Topic for Frontiers in Environmental Health, Housing and Health, September 2015 to December, 2018
- Guest Editor, Special Issue on "Children Exposures to Environmental Contaminants", International Journal of Environmental Research and Public Health, September 2015 to December 2016 (Highly successful special issue)
- Reviewer Medical Science (OMICS Group), October 2014 to Present (Multiple Articles/Times)
- Reviewer: PLOS ONE, Spring 2014

- Reviewer: Archives of Environmental and Occupational Health, October 2014
- Reviewer: British Journal of Medicine and Medical Research, September 2014
- Reviewer: Journal of Occupational and Environmental Hygiene, January, 2014
- Reviewer: Archives of Environmental Contamination, January, 2014
- Reviewer: Journal of Occupational and Environmental Hygiene, Spring 2013
- Reviewer: Journal of Food Processing & Technology 2013
- Reviewer: Journal of Exposure Science and Environmental Epidemiology, 2012
- Reviewer, Science of the Total Environment, Summer 2011, Spring 2018
- Reviewer, Journal of Human and Ecological Risk Assessment (HERA), 2009
- Reviewer, Risk Analysis, 2006-2007
- Abstract Reviewer, International Society of Exposure Analysis, Conference in Durham, NC, 2007.

National Advisory Panels

- Panel Reviewer, EPA Center, Center for Early Lifestage Vulnerabilities to Environmental Stressors, Jan 2021
- External Peer Review of EPA's Draft Tire Crumb Final Report, June 2018. Final Report not available yet
- External Peer Review of EPA's Draft Document and Model "Consumer Exposure Model, August 2016. Final Report not available yet
- External Peer Review of EPA's Draft Document "Child- Specific Exposure Scenario", 100 page document of exposure algorithms, August 2013: <u>https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=200445</u>
- External Peer Review of EPA's Draft Document "Exposure Factors Handbook", 500 page document, March 3-4 meeting in Washington, DC, 2010: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252
- External Peer Review of EPA's draft document Dioxin Exposure in Ceramic Studies, January 2008, (report available at: http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=154560)

Other National Activities

- Requested to Serve as Outside Reviewer for a Tenure and Promotion Candidate, University of Oklahoma College of Public Health, November 2018
- Reviewer for the UNCF STEM Scholars 2018 Review Minority, March 2018
- Reviewer for the ASPH/EPA Fellowship Program, February 2010
- Reviewer for the ASPH/CDC Public Health Fellowships, May 2010
- Reviewer, ASPH/EPA Environmental Health Fellowship Objective Review Procedures, February, 2009
- Reviewer, ASPH/EPA Environmental Health Fellowship Objective Review Procedures, February, 2007.
- Workshop Participant, EPA's Community Based Risk Assessment Workshop, EPA Headquarters, Research Triangle Institute, October, 2007.
- Reviewer, ASPH/CDC/ATSDR Internships in International Global Immunizations Division Fellowship Program and Global Aids Division Fellowship Program, 2006

See position on EPA advisory board (under positions)

INVITED TALKS, PRESENTATION, TRAININGS

- Alesia Ferguson, ASSP-NCDOT-Talk at Technical Meeting, Making Educational Requirements for Safety Professionals Meet Field Requirements, March 14th, 2022
- **2.** Alesia Ferguson, Presenter, Massachusetts Public Health Association, June 7th (present Award to Past Dr.PH Student), Boston, 2019
- **3.** Ferguson, A. Talk to Biology Students at NCAT-Encourage Minor in Environmental Health and Safety, April , 2020 two sections over zoom, invited by Dr. Angela White
- **4.** Ferguson, A. Talk to Biology Students at NCAT-Encourage Minor in Environmental Health and Safety, April 8th, 2019 two sections, invited by Dr. Angela White.
- **5.** Ferguson, A. Discussant, Human Health Risks, GoMRI synthesis Effort, Webinar, Core 7BModeling for Synthesis, May 9th, 2019.
- Ferguson, A. Presenter, Human Physical Health Risks, GoMRI Synthesis Effort< Core 7BModeling for Synthesis, May 6th, 2019.
- **7.** Ferguson, A. Healthy Homes Community Training, Malvern Arkansas, Nov 17th, 2017.
- **8.** Ferguson, A. "Gulf Exposures" Arkansas Department of Health, Grand Rounds Presentation, November 2nd, 2017, Little Rock Arkansas.
- Ferguson, A. Two training seminars on "Understanding Healthy Homes for Weatherization Work" and One-training seminar on "Navigating the Lead Laws for Weatherization Workers", 2017 Arkansas Weatherization Assistance Program, Annual Conference, October 31srt to November 2nd, North Little Rock, Arkansas.
- 10. Ferguson, A. "Keeping a Healthy Home" Our House, Little Rock, Arkansas, October 26th, 2017
- **11.** Ferguson, A. "Promoting Healthy Homes" City of Wabbeseka, Arkansas, September 7th, 2017
- 12. Ferguson, A. "Book Club Discussion of Toms River: A Story of Science and Salvation" Arkansas Chapter of the American College of Physicians, Annual Retreat, Heber Springs, Arkansas, April 9th, 2017.
- **13.** Ferguson, A. "Risk Assessment for Sensitizers, Special look at Methylisothiazolinone" FDA Headquarters, invited talk, Baltimore, April 6th, 2017.
- **14.** Ferguson, A. "STEM Leadership for Girls Conference", Panel Presenter, University of Arkansas at Little Rock, April 22, 2016.
- **15.** Ferguson, A. "Dermal Exposure and Dose: Should we be Concerned?" UAB School of Public Health, Birmingham Alabama, April 13th, 2016.

- **16.** Panel Presenter and Poster Judge, Arkansas Louis Stokes Alliance for Minority Participation Spring Research Conference, Embassy Suites, Little Rock, April 8-9th, 2016
- Ferguson, A. "The Use of Liberating Structures in Science Education" 4-hr Workshop Given at the Arkansas Education Association (AEA), Double Tree Palisades, Little Rock, November 5th, 2015
- **18.** Ferguson, A. "Health of Home: Who is Responsible" National Community Development Association, Region 6, Marriot Little Rock, Thursday October 29th, 2015
- **19.** Ferguson as Trainer, 8-hr Community Trainings: "Healthy Homes for Community Workers" free through the National Center for Healthy Homes and the Pulaski County Weatherization Center
 - a. August 28th, 2015, Willie Hinton Neighborhood Center to 15 Community Workers
 - b. August 29th, 2015, Baptist Health Day Care Center to 43 Daycare Workers
- **20.** Ferguson, A. "Health of the Home, Who is Responsible" U.S. EPA Region 6 Environmental Justice Training Workshop (host: Janus Institute for Justice), Little Rock, June 18th, 2015.
- **21.** Ferguson, A. "Women's Health: Health of the Home Environment" AMDPA Conference Crowne Plaza, Little Rock, June 13th, 2015.
- **22.** Ferguson, A. "Healthy Homes for Community Workers", Office of Community Based Public Health, UAMS College of Public Health, Hot Springs, Clarion Hotel, June 2nd, 2015
- **23.** Ferguson, A. 'Healthy Homes', Arkansas Society for Public Health Education conference (SOPHE), Little Rock, April 10th, 2015.
- 24. Ferguson, A. Lunch Learn Series for Day Care Centers, Arkansas Department of Health, 'Integrated Pest Management': March 19th, 2015, and Wrap-Up and Checklist Evaluation, July 30th, 2015.
- **25.** Burroughs-Ray, D., **Ferguson**, A. (2014). HIPPY for Healthy Homes Program: Results of Pre and Post Surveys Addressing Indoor Air, Quality Contaminants in Homes. Poster presented at: Student Research Day; Little Rock, AR, April 16th.
- **26.** Smith, R. and **Ferguson, A**., other trainers, Pulaski Tech Weatherization Center, first two- day Healthy Homes Training as an official Healthy Homes Center, taught Integrated Pest Management, and Overview, 18 Attendees, Dec 3rd and 4th, 2013. This was 2nd requirement to become an Official Trainer for the National Health Homes Center.
- 27. Ferguson, A., and Kavouras, Ilias, 3.5 hour training/talk on 'Healthy Homes', Arkansas Chapter of National Association of Housing and Redevelopment Officials AR NAHRO, 60 attendees, Dec 12th-2014Crowne Plaza, Little Rock Arkansas
- **28. Ferguson,** A., COPH Tuesday Seminar: Lead Activities in the State: Findings from Grant Support, March 26th, 2013
- **29. Ferguson, A**, "How Healthy is Your Home" Arkansas Department of Health, Grand Rounds, Arkansas, Nov 15th, 2012

- **30. Ferguson, A**. "Lead Activities in the State of Arkansas" Dallas Region 6 Scientific Seminar, Oct 23rd, 2012
- **31. Ferguson, A** "Healthy Homes and Affordability Arkansas Minority Health Summit, *Healthy People 2020": Shape Up Arkansas*, Philander Smith College Friday, April 20, 2012
- **32. Ferguson, A**., and Simmons, Lori. "Contributing to a National Lead Screening Database, Arkansas Department of Health, Grand Rounds, October 7th, 2010
- **33. Ferguson, A**., "Contributing to a National Lead Screening Database, College of Public Health Tuesday Seminar, December 14th, 2010
- **34. Ferguson, A.** "Having A Healthy Home", HIPPY 25th Anniversary, Embassy Suites, Little Rock, Feb 2011
- **35. Ferguson, A**. "It's fun to be an engineer, with overlapping medical interest", UAMS, Student Summer Volunteer Program, Two Talks, July 2010
- **36. Ferguson, A**. "Risk Assessment Model: Where does your work fit in?" UAMS, Summer Research Internship Program Talk, July 2010
- **37. Ferguson, A**. Importance of Lead Screening, Head Start Presentation, Embassy Suites, July, 2010
- 38. Ferguson, A. "Looking at Adherence to the Human Skin for Chemical Uptake: Use of a Computer Controlled Mechanical Chamber," The 1^{rst} International Symposium for Industrial Pharmacy and Clinical Pharmacy, Guangzhou, China, October, 2009
- **39. Ferguson, A**. "Child Safety and Welfare: Protecting Children from the Dangers of Lead" Two Workshop Presentations: HIPPY State-Wide Conference, Embassy Suites, Little Rock, February 23rd, 2009
- **40. Ferguson, A.** "Arkansas People Participating in Lead Education, Is Lead Still a Problem?" Children's Hospital Psychosocial Grand Rounds, January 5th, 2009
- **41. Ferguson, A.** and Kern, D. "Arkansas People Participating in Lead Education, Is Lead Still a Problem?" College of Public Health Tuesday Seminar, November 9th, 2008
- **42. Ferguson, A.**, Bursac, Z., Coleman, S., Biddle, D., Johnson, W., "Comparisons of Computer Controlled Chamber Measurements for Soil-Skin Adherence from Aluminum and Carpet Surfaces" Arkansas Biosciences Institute (ABI) Symposium, Peabody Hotel, Little Rock, Arkansas, October, 2008
- **43. Ferguson, A.,** "Occupational Hazards for Hairstylists" Arkansas State Health Department, November, 2007

- **44. Ferguson, Alesia**, "Understanding Personal Exposures: Are you in Danger" State Health Department Presentation, November, 2006
- **45. Ferguson**, A. C. "Videotaping and Video-Translation Methodologies for Children", Presentation at the Bayer Crop Science Headquarters, Ohio, Friday, January 19th, 2006
- **46. A.C. Ferguson**, and Sheire Coleman "Estimating the Mass Transfer of Toxic Chemicals to the Human Skin, Biosciences Institute", Science and Industry Advisory Committee Meeting, Participated
- **47. A. C. Ferguson**, "Exposure and Dose Analysis for Chemicals" Presentation at University of Arkansas for Medical Sciences, Office of Minority Affairs, September 5th, 2004
- **48. A. C. Ferguson,** "What Every Health Professional Should Know About Exposure Assessment!" Health Research, Policy and Health Promotion Conference, College of Public Health, December 7th, 2004

Lead Presentation and Workshops: 2004 to 2012

Over 30 community Lead Presentations given across the State to various communities (e.g., Pine Bluff, West Memphis, Jacksonville, Hot Springs, North Little Rock, Helena, West Helena)

North Carolina A&T Teaching/Course Development 2018 to Present

- 1) Enhanced EHS 432, add more components to Safety Plan (e.g., Ethics and Professionalism components)
- 2) Enhanced EHS 498 with research Modules to Facilitate Research instead of Field Work for Those who could not find internship Due to Covid Pandemic, Fall 2020 and Spring 2021
- 3) Fire Prevention, EHS 214, Online and In Class Teaching, Added Safety Presentations for Final to enhance communication skills and culminate learning objectives
- Design of Engineering Hazards Controls (EHS 432): Online and In Class Teaching: Took over course in April of Spring 2019 semester, due to illness of faculty member, Taught again Spring 2020 (Added Groups Safety Plans that Year, for Group Learning)
- 5) Contributed Exam Questions and Graded Biology Thesis (3 students-ES 711 questions Included), Fall 2019
- 6) Industrial Hygiene II (EHS 313: Undergraduate): Online and In Class Teaching: Enhanced modules: Spring 2019
- 7) Current Issues in Environmental and Occupational Health (EHS 711: Graduate Course): Designed new and updated course: Spring 2019, Spring 2020
- 8) Industrial Hygiene I (EHS 313-Undergraduate): Online and In Class Teaching: Enhanced modules and designed in class Industrial hygiene Lab: Fall 2018 and Fall 2019
- <u>NCAT Doctoral Advisory</u>-Foluke Adelabu-Use of Improved Videotaping Technologies for the Collection of Activity Patterns for Soil/Dust Ingestion Exposure, Spring 2021 to Present.
- <u>NCAT Post-Doctoral Student</u>-Ashok Dwivedi August 2019 to June 2020 (Received Appointment at USCF-California due to Work On Beaches Grant

NCAT Mentor for two Biology Student Rotations at NCAT

- AJana Blackwell: Exposure to Chemical in Cosmetology (second rotation, ended Dec, 2018)
- Aubria Harris Summons: Lead hazards in the State (first rotation (ended Oct, 2018)

NCAT Masters Committee Member: Biology Student Aldeisha Smith 2019-2020: Tittle: Mechanisms of Diabetic Kidney Disease

University of Texas PhD Committee Member: Student: Tanu K Altomare: Tittle: Estimating Children's Health Risk from Recreational Beach Play Following an Oil Spill Event, Anticipated Graduation Date Spring 2021.

UAMS TEACHING/COURSE DEVELOPMENT: 2004 to December 2018

- 1. Environmental Exposure Assessment (PBHL5263, OEHM 5263), Combination of in-class and online discussion and lectures
 - a. Moved from Co-Lecturer to <u>Course Director</u> (ongoing-13 years)
 - b. Developed online sound lectures for 12 topics: Introduction to Exposure Assessment, Unified Terms, Inhalation, Dermal, Ingestion, PBPK Modeling, Biological Modeling, Activity Pattern Analysis, Exposure, Statistics, Experimental Design, Model Review
 - c. Adopted (from Dr. Thomas Rimmer) and taught 5 other topics: Gas and Vapors, Aerosol, Occupational Exposure Assessment, Indoor Air Quality, Outdoor Air Pollution
- **2.** Occupational and Hazard Control (PBHL5043,OEHM5043),<u>Co-Lecturer to Course Director</u>, Combination of in-class and online discussion and lectures (ongoing-13 years)
 - a. Developed sound lectures for 4 lectures: General Safety, Ergonomics, Confined Spaces, Electrical and Fire Hazards
 - b. Adopted (from Dr. Thomas Rimmer) and taught 3 other topics: Radiation Control, Noise Control, Ventilation Control
- **3.** Environmental Policy (PBHL5263), <u>Co-Lecturer</u>: Combination in class and online discussion and lectures (3 years)
 - a. Developed online sound lectures for 2 lectures: Energy Issues and Public Health and Environmental Ethics and Justice
- **4.** Governmental Regulations of Environmental Health (PBHL5073,OEHM5073), Co- Lecturer, Combination of in-class and online discussion and lectures
 - a. Developed farmworker regulation lecture (Taught in class: 2 seasons)
 - b. Developed online sound lectures for 2 lectures: State and Federal Sanitation Regulations and State and Federal Waste Water Regulations, 2010 to Present
- 5. Biology for Public Health (PBHL5311), Co-Lecturer, Only on-line (Ongoing)
 - a. Developed sound lectures for 3 lectures: Respiratory Diseases, Cardiovascular Diseases, Growth and Development
 - b. Assisted with development of Biology for Public Health Pre-Test
- 6. Built Environment (PB), Co-lecturer, Only on line
 - a. Healthy Home sound lecture, Fall 2011

- 7. College of Public Health Doctoral Competency Exam: Preparation and Grading of Questions on Environmental Policy: 2006-2017.
- **8.** College of Public Health, Reviewer and Presenter, Grants Writing and the Peer Review Process for Doctoral Students (PBHL/HPPR/HSRE 9123/9123/9503), Fall 2013. Fall 2014
- **9.** College of Public Health, Lecture, Public Health Law (PBHL 5283), Environmental Energy and Economic Policy, Fall 2014
- **10.** Environmental and Industrial Biological Health (ENVH 5044): Course Director-Developed and Taught New Online Version (Summer 2017)
- **11.** Graduate Thesis, Preceptorship and Integration Projects, Different Student Projects, Varying Fields and Topics Within Public Health, 2004-2014

UAMS-Integration/Culminating Chair or Committee Member

Courtney Del Donno, Fall 2018 James Davis, Spring 2018 Shaima Zayed, Spring 2018 Kennedy Bryan, Spring 2017 Hannah Baroni, Spring 2016 Heather Collier, Spring 2016 Raven Turner, Fall 2016 Desiree Burroughs Ray, Spring 2015 Jenna Rhodes, Fall 2014 Ashley Richison, Fall 2014 Janelta Woolfolk, Spring 2014 Etienne Nzabarushimna, Spring 2014 Natalie Dillion, Spring 2014 Jagualene Scales, Spring 2014 Bradley Houston, Spring 2013 Amanda Saffael, Spring 2013 Sarah Vestal, Fall 2012 Sarah Hurst, Fall 2012 Ashley Bachelor, Fall 2012 Leah Welker, Spring, Summer, Fall 2012 Alexander Geddes, Spring, Summer, Fall 2012 Victoria Land, Spring 2012 Jessica Jester, Spring 2012 MaryLou Wallace, Spring 2012 Cathy Flanagan, Fall 2010 Shunika S. Bryant, Spring, 2011 Jonathan Dial, Summer and Fall, 2010 Deborah Biddle, MPH, Fall 2008 Kimberly Hooks, MPH, Spring, 2008 Sylvana Niciteretse, MPH, 2008-2009 Evita Asumuga, MPH, Fall and Spring, 2006-2007

UAMS Preceptorship (Preceptor, or Preceptor Advisor)

Mason Sifford, Summer, 2018 Stephen Hedges, Spring 2017 James Davis, Fall 2017 Shaima Zayed, Fall 2017 Heather Collier, Fall 2016 Aja Nia Hearne, Fall 2016, Spring 2017 Raven Turner, Spring 2016 Desiree BurroughsRay, Summer 2014 Ashley Richison, Summer 2014 Kelvin Gibson, Fall 2013 Janelta Woolfolk, Summer 2013 Amanda Saffael, Spring 2013 Tina Gomez, Summer 2012 Leah Welker, Spring, 2012 Andrew Haner, Fall 2011 Shunika S. Bryant, Summer and Fall, 2010 Cathy Flanagan, MPH, Spring, 2009 Deborah Biddle, MPH, Spring 2007 Evita Asumuga, MPH, Spring 2006

Thesis Committees

- i. Jason Callahan, 2012
- ii. Lashunda Briggs, 2014-2015

Advising, Mentor Committee or Project Help

- a. Program advisor for Joint MPH-MD students Desiree Boroughsray and Aja Nia Hearne, 2013-Present.
- b. Program Advisor for many other MPH students, 2010-Present
- c. Dr.PH Program, Sandra Walker (Practicum Advisor), Spring 2014
- d. Cathy Flanagan: Review of Study Plan for Generalist Track, Summer 2009
- e. Madhura Chandak: Topic" R Strategies for Waste Management" in Government Relations, Fall, 2006
- f. Quinyatta Mumford, DrPh Mentee, Fall 2017 to Present.
- g. George Hudson, DrPh Mentee, Fall 2017, Spring 2018

STANFORD UNIVERSITYTEACHING/COURSE DEVELOPMENT:

2004 and 2005 Two in class 3-hr lectures on Dermal Exposure Assessment

OTHER DEPARTMENT ACTIVITIES

- Reviewer for ARCHD Internal Applications, UAMS March/April, 2018
- Competency Development for Schools of Public Health. Evaluation of the MPH and MS Degrees, 2010-2012 and again in 2017 for new Competencies.

- Developed department website with help of COPH web designer, created outline and gathered materials and profiles for website, 2007, 2009, 2011 and 2012 improvements with the addition of new staff and faculty.
- Developed department brochure, assisted with and featured on College of Public Health recruitment DVD
- Developed Certificate Program in Occupational and Environmental Health, Spring and Summer, 2009
- Presenter, Open House (2 Separate Days), College of Public Health, MS and MPH Opportunities for study in Environmental and Occupational Health, 2009
- Ferguson, A. C. "The Fun in Being an Engineer", Girls of Promise, Women's Foundation of Arkansas, University of Arkansas Little Rock, Arkansas, Recruitment Event, April, 2006
- Ferguson, A. C. "Public Health Career", Girls of Promise, Women's Foundation of Arkansas, Mountain Home, Arkansas, Recruitment Event, April, 2005
- College of Public Health Recruiting, Hendrix tour of the College of Public Health, Lab Tour Guide, February 2008
- **C. Ferguson**, "My Life and a Career in Public Health", Recruiting Talk at the Philander Smith College, Arkansas, April, 2005
- **A.C Ferguson**, Radio Interview: Promote Public Health Careers: Series on Health Careers: Jonesboro, October 12, 2005

MY STUDENT (COLLEGE) ACTIVITIES & HONORS

- Graduate Mentor for NASA-RISE Program, Stanford University, 2001, 2002
- President of Village Rental Coop, Stanford University, 1999
- Vice President of the Civil Engineering Honor Society at FIU, 1993
- Vice President of the Water Environment Federation at FIU, 1994
- Member, American Society of Civil Engineers, 1992-1994

PROFESSIONAL ORGANIZATION AND AFFILIATIONS: MEMBERSHIP

2016-2018	National Environmental Health Association (NEHA)
2005- 2014	Society for Risk Analysis
2002- 2016	International Society of Exposure Analysis
2007 to 2016	International Society of Environmental Epidemiology
2007 to 2010	American Public Health Association
2010 to 2013	Association of Environmental and Science Professors

OTHER UAMS MENTORSHIP AND DIVERSITY PROGRAMS AND OPPORTUNITIES

- 1. <u>Summer 2017 Mentees: Office of Diversity Affairs:</u> Rachael Jackson (Fayetteville, 4th year) and Issac Sims (UCA, 1rst year): Housing and Arsenic Projects
- 2. Summer Mentor/Supervisor for Arkansas Commitment Program (Student: Devon Hood, Building a Healthy Homes Web Portal, 2016.

- 3. Summer Mentor/Supervisor for Arkansas Commitment Program (Student: Devon Hood, Participation in EPA Grant IPM and Chemical Use Reduction-Survey Development, 2015.
- International Society of Exposure Science (ISES) Mentorship Program, October 2009 to Present, 2009-201): International Student, Mustafa Babayigit, located in Ankara Turkey 2013-2014: Miriam Calkins (MS Program-University of Washington-Exposure Science) and 2014-2015: Laura H Kwong, Stanford University PhD program (Exposure Study in Bangladesh)
- Summer Mentor/Supervisor for Arkansas Commitment Program (Student: Devon Hood, Topic Hairstylist-Coding Activity Patterns and Participation in EPA Grant IPM and Chemical Use Reduction, 2013.
- 6. Sagicor Visionaries Caribbean Challenge: Mentorship Match with Michael King (St. LuciaMarigot Secondary School)" Unhealthy Foods at Our School Canteen, Spring 2013.
- Summer Mentor/Supervisor for the Arkansas SRIP Program (Student: Jasmine Davis, Topic: Parental Survey for Lead Education) and the INBRE Program (Student: Osborne Smith, Topic: Survey Development for a Pediatric Exposure to Cadmium, Raven Gray, Topic: Hairdresser Activity Patterns), 2011-2012
- 8. Summer Mentor/Supervisor, Arkansas Commitment Program in conjunction with the Arkansas Cancer Community Network, Aja Nia Hearne, Summer 2010
- Research Mentor, Arkansas Cancer Community Network (ARCCN) Summer Research Internship Program (SRIP) NIH Minority Supplement under Dr. Billy Thomas, Exposure to Basic Science: Student Topic, Dioxin Exposure in Clay, Use of an Adherence Chamber, Student: Jasmine Davis, Summer 2009 and 2010
- 10. Summer Mentor/Supervisor, Two students from Cancer Control Summer City Program, Students: Brittany Lloyd and Lakacia Jones, 2009
- 11. Professional Advisement Session for the Arkansas Louis Stokes Alliance for Minority Participation, Invited Talk to High School Students, University of Arkansas Pine Bluff, July 2009
- 12. Arkansas Public Health Institute, Business Institute Mentee Advisor, November 2008, thru October, 2009, ATV Accidents
- 13. Arkansas Public Health Institute, Business Institute Mentee Advisor, November 2007, thru October, 2008, Hand Washing in Day Care Facilities, Group received runner-up.
- Department Lead, Summer Teen Volunteer Program, 2006, 2007, 2008, 2009 and 2010. Supervising over <u>25 different students</u> on various projects and tasks to promote their interest in research and science
- 15. Arkansas Women's Foundation, 2006 and 2007 presenter and mentee for Girls of Promise
- 16. Arkansas Public Health Institute, Business Institute Mentee Advisor, November 2006, to October, 2007, Group Business Plan "Healthy Hand Connection", Group won second place
- 17. Mentor to Paloma Beamer, Stanford University, Dr. Beamer is now an Associate Professor at the Mel and Enid Zuckerman College of Public Health, University of Arizona, 2000 to Present

OTHER UAMS ACTIVITIES

- Hosting Healthy Homes Booth, Conway Eco-fest Event, 2014 and 2016 (assistance of students Heather Collier and Raven Turner)
- ARCHWA Conference, June 10, 11th, Embassy Suite Hosted Healthy Homes Booth, 2016 (Assistance of Student Devon Hood)
- **Graduation Announcer of Name**s, Graduate School, Spring 2013, 2014, 2015 Announcer of Names, Graduate School Induction Ceremony, Fall 2012 and 2013, Duty as Graduate Council Chair for 2 years.
- Judge, University of Arkansas at Little Rock Science Fair (Middle and High Schools), Environmental Science Division, Spring 2013

- Main Planner and Organizer, Healthy Homes Two-Day Training for Practitioners, Supported through the National Healthy Homes Center, Environmental Protection Agency, Arkansas Health Department 82 attendees, National record set April, 2013
- <u>Planner</u> and <u>Panel Presenter</u>, Arkansas Conference on Children's Health and the Environment, April 3rd, Conference, 2009, Co-Sponsored by EPA and UAMS
- Judge, Lisa Academy Science Fair, January, 2008
- HIPPY, Coordinator of the Year Selection Committee, 2009
- **Reviewed**, "Arkansas Children's Natural Wonders" 2008 Report, Improve Document, through Elaine Wooten, 2008
- Head Coach, Girls Soccer Teams, Little Rock Futbol Club, 2004-2009
- Marshal, UAMS- College of Public Health Graduation, 2006, 2007 and 2011
- Peer Mentoring, Minority Engineering Women Workshop, North Carolina, June 2007
- Participant, 16th Annual Professional Development Day, UAMS 2006
- **<u>Participant</u>**, Striking Out Tobacco In Arkansas, Clean Indoor Air 3rd Annual Conference, August 16, 2006, at the Wyndham-Riverfront, North Little Rock, Arkansas
- <u>**Participant**</u>, Winning Against Childhood Obesity, 2nd Annual Conference, October 2, 2006, at the C. A. Vines 4-H Center, Ferndale, Arkansas
- <u>Participant</u>, Water's Educational Seminar, Efficient Method Development, Mass Spectrometry, Principles and Practices of Effective UPLC, Tuesday, October 17th in Holiday Inn, Shackleford, Little Rock, AR
- Participant, 3-day Undoing Racism Workshop, Through the People Institute 2004