Education

Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA

expected 2023

Doctor of Philosophy in Epidemiology

Honors: Dean's Endowed Doctoral Scholarship

Dissertation: A value of information framework for infectious disease modeling

Rollins School of Public Health, Emory University, Atlanta, GA

May, 2013

Master of Science in Public Health in Epidemiology

Honors: Global Field Experience Award: Received funds to pursue research on the development of diagnostic tools for Chagas disease in Santa Cruz, Bolivia during the summer of 2012

Thesis: Temporal and spatial epidemiology of enteric parasitic infections in a pediatric cohort of children living in the peri-urban areas of Lima, Peru

Accessible at: http://pid.emory.edu/ark:/25593/dr9b7

Oberlin College, Oberlin, OH Bachelors of Arts in Biology

May, 2011

Honors: John Frederick Oberlin Scholarship

Research Publications

McAdams RJ, Acevedo-Fontanez AI, **Arcury-Quandt AE**, Heberger JR. Head Injuries Among Children Treated in US Emergency Departments, 2015-2019. Pediatrics. *Under review*.

Arcury-Quandt AE, Harbertson J, Ziajko L, Hale BR. Risk factors associated with positive depression screening across the shipboard deployment cycle. BJPsych Open (2019). 5(5):e84.

Cama VA, McDonald C, **Arcury-Quandt A**, Eberhard M, Jenks HM, Smith J, Feleke SM, Thomson L, Wiegand RE, Cantey PT. Evaluation of an OV-16 IgG4 ELISA in humans and dynamics of Ov-16 IgG4antibody responses in a non-human primate model of *Onchocerca volvulus* infection. Am J Trop Med Hyg (2018). Oct;99(4):1041-1048.

Quandt SA, **Arcury-Quandt AE**, Lawlor EJ, Carrillo L, Marin AJ, Grzywacz JG, Arcury TA. 3-D jobs and health disparities: The health implications of Latino chicken catchers' working conditions. Am J Ind Med (2013). 56:206-215.

Arcury-Quandt AE, Gentry AL, Marín AJ. Hazardous materials on golf courses: experience and knowledge of golf course superintendents and grounds maintenance workers from seven states. Am J Ind Med (2011). 54: 474-485.

Quandt SA, **Arcury-Quandt AE**, Washington CJ, Mulrooney T, Bertoni AG. Community Gardens and Farmers Markets, Forsyth County, North Carolina. Wake Forest University Translational Science Institute Working Paper. Winston-Salem, NC, 2010.

Lally BE, Geiger GA, Kridel S, **Arcury-Quandt AE**, Robbins ME, Kock ND, Wheeler K, Peddi P, Georgakilas A, Kao GD, Koumenis C. Identification and biological evaluation of a novel and potent small molecule radiation sensitizer via an unbiased screen of a chemical library. Cancer Research. 2007;67(18):8791-9.

Formal Posters/Presentations

Arcury-Quandt AE. Poverty, testing, and COVID-19 case rates in Allegheny County. Paper presented at Dean's Day, University of Pittsburgh School of Public Health, Pittsburgh, Pennsylvania, 2022.

Powers T, **Arcury-Quandt A**, Traynor S, Lay J, Smoak B. Teaching Modern Disease Surveillance and Investigation Skills in Low-Income Nations. Paper presented at the International Conference on Emerging Infectious Diseases, Atlanta, Georgia, 2015.

Arcury-Quandt A, Harry C. Spatial patterns in foodborne illness in Oklahoma County residents 2001-2010. Paper presented at the 142nd Annual Meeting of the American Public Health Association, New Orleans, Louisiana, 2014.

Arcury-Quandt A, Jenks MH, Eberhard M, Moore A, Cantey P, Cama V. Evaluation of IgG4 Immune Responses Against Ov16 and Bm14 in Non-Human Primates Infected with *Onchocerca volvulus*. Paper presented at the 61st Annual Meeting of the American Society of Tropical Medicine and Hygiene, Atlanta, Georgia, November, 2012.

Arcury-Quandt AE. Latino golf course workers and their supervisors: experience and knowledge of hazardous materials. Paper presented at the 71st Annual Meeting of the Society for Applied Anthropology, Seattle, Washington, March, 2011.

Teaching and Workshops

MIDAS Tenth Annual Conference to Increase Diversity in Mathematical Modeling and Public Health, 2022 Co-Instructor, Back of the Envelope Calculations

Professional Experience

MIDAS Coordination Center, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA
Graduate Student Researcher
September 2020 – Present

- Create and review metadata for COVID-19 datasets
- Perform scoping review of value of information analysis in health research
- Analyze COVID-19 surveillance data quality and timeliness, particularly with respect to data sources important to infectious disease modelers
- Develop yellow fever modeling study for Brazil and perform value of information analysis

Community Forge, Pittsburgh, PA

Public Health Advisor

September 2020 - August 2021

- Advise Community Forge leadership on COVID-19 policy and best practices
- Collaborate with advisors to create a weekly COVID-19 situation report
- Meet with community members and staff regarding COVID-19 practices
- Support business incubator participants with respect to COVID-19 information

MIDAS Coordination Center, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA
Graduate Student Employee

November 2019 – August 2020

- Curate membership, grant, and publication data
- Establish repository for COVID-19 data
- Conduct COVID-19 literature search and curate results
- Aggregate data on COVID-19 serological study

Department of Epidemiology & Prevention, Wake Forest School of Medicine, Winston-Salem, NC Volunteer

July 2019 – August 2019

- Edit book chapters for clarity and accuracy
- Write section on zoonoses for chapter on livestock workers
- Format references

Laulima GS/Walter Reed Army Institute of Research, Silver Spring, MD

Project Coordinator

June 2017 - June 2019

- Perform longitudinal analysis of mental health risk factors
- Provide epidemiological, analytical support to other departments and divisions within WRAIR
 - Establish thresholds for animal stress model
 - Calculate sample size and develop study design recommendations for detection of rare infectious disease in a region with a large military population
- Assist in the development of research projects and grant applications
- Prepare IRB and DUA submissions
- Studies developed:
 - o In collaboration with Janus-I and General Atomics, development of rapid PCR multiplex
 - Adherence to policy for malaria chemoprophylaxis prescription and major side effects of malaria chemoprophylaxis

- o Tick-borne encephalitis seroincidence
- Long term effectiveness of vaccines
- Arboviral seroincidence

ClinicalRM/Walter Reed Army Institute of Research, Silver Spring, MD

Epidemiological Training Lead

April 2015 – June 2017

- Conduct data quality and descriptive analyses of surveillance data
- Develop and conduct workshop on Epi Info software for national epidemiologists in Azerbaijan
- Develop table top exercise for national-level epidemiologists in Armenia
- Provide epidemiological, analytical support to other departments and divisions within WRAIR
 - Analysis of training evaluations following use of live patient models
- Assist in the development of research projects and grant applications
- Studies developed:
 - Seroincidence and misdiagnosis of arboviral diseases within the military
 - o In collaboration with Abbott Laboratories, evaluation of a mobile diagnostic platform for use in forward operating units
 - o Adherence to policy for vaccines or other prescriptions and the economic impact thereof
 - Long term effectiveness of certain vaccines

Oklahoma City-County Health Department, Oklahoma City, OK

Public Health Preparedness & Emergency Response Epidemiologist

August 2013 - April 2015

- Complete all hazards jurisdictional risk assessment
- Perform analyses of major causes of mortality for Community Health Status Assessment, published as the Oklahoma County Wellness Score
- Conduct syndromic surveillance and develop tools to utilize these data in other programs
- Evaluate health department programs and advise on methods to increase efficacy
- Produce assessments, reports, and maps to support the agency's mission
- Conduct communicable disease and outbreak investigations
- Serve as subject matter expert for community partners
- Update guarantine and isolation protocols
- Develop health information exchange protocols
- Assist in development of statewide Ebola monitoring and response protocols
- Develop community recovery plan

Johns Hopkins University, Baltimore, MD

Centers for Disease Control and Prevention, Division of Parasitic Diseases and Malaria, Atlanta, GA Hospital Universitario Japones, Santa Cruz, Bolivia

Researcher/Intern

May 2012 - August 2012

- Established integrated data management system
- Collected Dried Blood Spots of maternal and umbilical cord blood for development of diagnostic tests for T. cruzi
- Performed diagnostic PCR on Dried Blood Spots
- Utilized multiplex assay to characterize cytokine response

Centers for Disease Control and Prevention, Division of Parasitic Diseases and Malaria, Atlanta, GA Laboratorian September 2011 – July 2013

- Developed data management system for onchocerciasis studies
- Analyzed dataset from a primate onchocerciasis study
- Performed ELISA assays to develop a standard curve for filarial antigens
- Developed and optimized ELISA protocols for various antigens
- Analyzed assay data
- Typed Trypanosoma cruzi parasites using PCR
- Sequenced guinea worm DNA
- Performed cytokine analysis of Trypanosoma cruzi infected samples

Department of Epidemiology & Prevention, Wake Forest School of Medicine, Winston-Salem, NC Research Assistant August 2006 - August 2011

- Qualitative Research
 - Edited interview transcripts
 - Coded data and extracted text using Atlas ti
 - Conducted qualitative analysis and developed manuscripts for golf course workers and chicken catchers
- Survey Research
 - Edited and programmed data collection forms, entered data
 - Collected data at farmworker camps, poultry worker clinics, and Latino community health clinics
- General Research Support and Writing
 - Proofread and formatted manuscripts and grant proposals, performed library searches

Department of Molecular Genetics, Wake Forest School of Medicine, Winston-Salem NC

Research Assistant

July - August 2010

- Learned to use the computer language R to use Bioconductor software
- Wrote scripts for sorting and eliminating irrelevant microarray DNA methylation data
- Organized data to fit into pre-existing structures and use pre-existing methods in Bioconductor
- Performed quality control analysis
- Created guide for these scripts and analyses

Department of Epidemiology and Prevention, Wake Forest School of Medicine, Winston-Salem, NC Translational Science Institute, Wake Forest School of Medicine, Winston-Salem, NC

Research Assistant

- May July 2010 Organized data collection for a project exploring local community gardens and farmers' markets
- Performed in depth interviews with community members
- Collected GIS data for mapping
- Wrote a report summarizing data

Other Experience and Professional Memberships

Member, American Public Health Association	2009 – Present
Member, Society for Epidemiologic Research	2021 – Present
Member, Council of State and Territorial Epidemiologists	2014 – 2015
Conference abstract reviewer, American Public Health Association	2015 – Present
Conference abstract reviewer, Society for Epidemiologic Research	2022 – Present