Shelby L Level

Status: Research Assistant
Field: Public Health, Data Analytics, Data Visualization
Techs: R, Git, GitHub, Shiny, SAS, SPSS

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Summary

Health data analytics and visualization enthusiast looking for an opportunity to continue my learning journey with R.

Education

Master of Public Administration - Ohio University   Jul. 2023 - May. 2024

* Graduate Research Assistant

Bachelor of Science in Public Health - University of Toledo   Aug. 2020 - May. 2023

* Magna cum laude

Work Experience

Research Assistant - Ohio University, Voinovich School of Leadership & Public Service   Aug. 2023 - Present

* Assisted with gathering 2012-2021 Ohio Medicaid Assessment Survey (OMAS) data for the Appalachian addendum and the Disability addendum of the 2023-2025 State Health Assessment (SHA)

* Created a brief report for the Regional QI Hub Quality Improvement Project (QIP) - Diabetes Institute, Ohio University on the connections between social determinants of health and chronic health outcomes and behaviors at the county and census tract levels in Ohio

* Analyzing survey data, social vulnerability indices, other Census Bureau data, and mapped transportation options and ADA compliant resources in Athens county for the Creating Healthy Communities Ohio Hub (Athens City County Health Department)

* Beginning to build interactive dashboards and applications with Shiny

Research Staff - Ohio University, Ohio Alliance for Population Health (OAPH)   Jul. 2023 - Present

* Analyzing CDC WONDER mortality data to identify health disparities in Ohio across geographic regions, time, and demographics

* Authoring several reports (diabetes, firearm mortality, disease mortality, etc.) focused on Ohio most generally and Appalachian Ohio in particular for audiences within and outside the organization

* Providing ad hoc analytics and visualization support for OAPH members and clients

Health Policy Intern - Health Policy Institute of Ohio (HPIO)   Jan. 2023 - Jun. 2023

* Used secondary data to create data visualizations by Ohio's counties, zip codes, and census tract levels

* Provided ad hoc analytics and visualization support for HPIO members and clients

* Reviewed data entry, statistical calculations, and proper citation formatting for reports and other materials as part of quality control measures

Data Analytics Intern - Ohio University, Ohio Alliance for Population Health (OAPH)   Aug. 2022 - Dec. 2022

* Used R to gather and clean Census Bureau data, National Survey on Drug Use and Health (NSDUH) data, Ohio Department of Health (ODH) data (various), and CDC WONDER mortality data

* Profiled drug overdoses at the national, state, and county levels (Lucas County, Ohio in particular) with series of illustrations including tables, charts, maps

Student Research Assistant - University of Toledo, Department of Medicine   May. 2022 - Aug. 2022

* Replicated HIV-1 Protease molecular dynamics simulations in vitro

* Induced mutations in the HIV-1 Protease, purified each mutated protease including four mutations and one wild type, and ran small angle x-ray scattering (BioSAXS) to confirm protein confirmation in simulated data

* Learned wet lab techniques in recombinant DNA transformation and protein purification

* Presented project updates to primary investigator and research team through weekly team meetings

COVID-19 Case Investigator - Wood County Health Department   Sep. 2021 - Feb . 2022

* Communicated with confirmed COVID-19 cases and close contacts to gather clinical information including symptom onset, testing date/results, and exposure
* Entered data so gathered into ODRS (Ohio Disease Reporting System) and Ohio Impact Statewide Immunization Information System (ImpactSIIS)
* Identified all close contacts of a confirmed case and determined exposure setting, vaccination status (using ImpactSIIS), and mask wearing
* Informed confirmed cases and close contacts about ODH COVID-19 quarantine and isolation guidelines

COVID-19 Vaccine Ancillary - Wood County Health Department   Apr. 2021 - Feb . 2022

* Directed COVID-19 vaccination clinics at several locations across the county
* Assisted patients with filling out consent paperwork and ensuring the proper storage of these medical documents
* Entered patient information into the ArmorVax online system and completed patients vaccination cards
* Managed inventory of PPE and clinical supplies used at the vaccination clinics

Data Projects

Social Determinants of Health in Ohio's Counties and Census Tracts - Ohio University   Dec. 2023 - Present

* This project involved comparing and exploring commonly used Social Determinants of Health (SDOH) indices and their association with health outcomes in Ohios counties and census tracts

Case for State-Supported Public Osteopathic Medical School - Morgan State University   Jun. 2023 - Jul. 2023

* Assisted with gathering demographic, Health Professional Shortage Areas (HPSAs), Medically Underserved Areas (MUAs), physician workforce, health status, and health outcomes data for Maryland and the Baltimore City and County metro area

Vaccination Rates, COVID-19 Case Rates, and Excess Mortality - University of Toledo   May. 2022

* Used SAS to clean and analyze data from Our World in Data and the Worldbank International Database
* Performed regression analyses to determine if COVID-19 vaccination rates significantly reduced new COVID-19 cases or excess mortality in approximately 185 nations during Fall of 2021

Certifications

Certified Health Education Specialist (CHES) - NCHEC   Jun. 2023

* National Commission for Health Education Credentialing Credential ID: 38648

Social-Behavioral-Educational Researchers and Students - CITI Program   Mar. 2022

* Credential ID: 46970379

Leadership & Community Engagement

KLAR Leadership Academy - University of Toledo, Neff College of Business & Innovation   May. 2022 - Mar. 2023

* Nominated to become a member of the 2022-2023 KLAR Leadership Academy through the University of Toledo Neff College of Business and Innovation
* Strengthened leadership, teamwork, communication, and critical thinking skills by participating in learning and service events on campus and within the local community

Emergency Medicine Aid for Ukraine - University of Toledo, Health Sciences Campus   Apr. 2022

* Developed and filmed educational videos demonstrating emergency medicine techniques and procedures at the Interprofessional Immersive Simulation Center for healthcare workers and medical personnel in Ukraine

Vice Commodore - University of Toledo Sailing Club   Dec. 2021 - May. 2023

* Served as Vice Commodore and Executive Board member of the University of Toledo Sailing Club

* Participated in regattas and other sailing events through North Cape Yacht Club and around the country

* Attended regattas in Chicago, New York, and the US Naval Academy in Annapolis during the Fall 2021 season

Vice President - Eta Sigma Gamma Honor Society Mar. 2021 - May. 2022

* Served as Vice President and Executive Board Member of the Iota chapter of the Eta Sigma Gamma public health honor society at the University of Toledo

* Created flyers, social media posts, and other digital media for the organization including a virtual BINGO board that raised over $1,000 to feed children in need within Toledo