Our Vision
A healthy Louisville where everyone and every community thrives.

Our Mission
To achieve health equity and improve the health and well-being of all Louisville residents and visitors.

Values
Collaboration, Grit, Innovative, Integrity, Quality

LOUISVILLE METRO PUBLIC HEALTH & WELLNESS

Spring 2023
Student Experiences Catalog

DEPARTMENT OF
PUBLIC HEALTH AND WELLNESS

NOTE TO STUDENTS

Practicum and internship opportunities are available at the Louisville Metro Department of Public Health and Wellness (LMPHW). Projects fall into a variety of public health concentration areas (epidemiology, health promotion, biostatistics, etc.). We have detailed a few specific projects that are currently available. Please refer to the division and project descriptions throughout and contact our academic health coordinator to discuss a project included here or an idea for one that is not featured in this catalogue at LMPHWinterns@louisvilleky.gov.

You can find much more information on the department by visiting https://louisvilleky.gov/government/health-wellness. For further information on the types of data collected and monitored by LMPHW, please visit: https://louisvilleky.gov/government/health-wellness/public-health-data-reports.

LMPHW STUDENT EXPERIENCES OVERVIEW

The Louisville Metro Department of Public Health and Wellness (LMPHW) is an accredited independent health department under the leadership of Dr. Jeff Howard MD, MPH, MBA, interm director and Chief Health Stragegist for the city. We deliver programs and services primarily through two sections: Health Operations & Center for Health Equity (CHE). Health Operations includes the Clinical/Health Services Division, Environmental Health Division, Office of Emergency & Public Health Preparedness, Laboratory Services, and Leadership, Development, & Administration. The Center for Health Equity contains Partnerships, Performance, and Policy & Innovation. CHE aims to achieve equity in the social determinants of health throughout Metro Louisville using a "Health in All Policies" approach.

Students will have the opportunity to understand the functional and practical work of a Metropolitan Health Department serving a population of approximately 750,000. Distinctive populations have been identified as under served and divergent health outcomes are indicated in association with the social determinants of health. Students will earn practical experience through working alongside public health practitioners while they work on projects including the following:

• Public Health Administration
• Policy Development
• Strategic Planning
• Public Health Accreditation maintenance
• Results Framework
• Quality Improvement
• Maternal and Child Health
• Public Health Law – Food service and Public Facility Establishments
• Chronic Disease Prevention – Health Promotions
• Vital Statistics data analysis
• Disease Surveillance & Monitoring
• Hazardous Materials Response
• Childhood Lead Poisoning Prevention
• Emergency Preparedness
• Drug Addiction – HIV/STD

Once you have browsed this catalog and selected a project of interest, please send a cover letter and resume to LMPHWinterns@louisvilleky.gov.

Title: Policy Analysis and Report Writing Assistance
Division: Center for Health Equity - Policy Team
Concentration area(s): Health Policy, Research and Writing

LMPHW Advisor: Rebecca Hollenbach
Project Supervisor: Abbey Bowman-Rogers

PROJECT DESCRIPTION

The policy team is looking for assistance in policy research and analysis as we continue to expand our capacity as a team. Many of these assignments would include drafting policy briefs, conducting literature reviews of policy issues, assisting in the creation of our forthcoming Health Impact Assessment, and tracking and researching current state and local legislation. While much of this work will be conducted independently in a hybrid setting, the intern will have opportunities to collaborate and engage with other analysts on larger scale projects and through team meetings and discussions.

GOALS/OBJECTIVES FOR THIS PROJECT

- Provide research and writing assistance to policy priority areas linked to Health Louisville 2025 (LMPHW's Community Health Improvement Plan) and other research as needed
- Assist policy analysts with ongoing projects (examples include policy evaluations, policy briefs, and legislation tracking)
- Participate in weekly team meetings and collaborate on group projects with other analysts

REQUIRED SKILLS:

Research, writing, analytical and problem-solving skills, demonstrated understanding of the social determinants of health and health equity, critical thinking, time management

PREFERRED SKILLS:

Some experience in the policy process (developing policies, analyzing policies, evaluating policies), public policy advocacy experience, ability to present persuasive messaging to a broad audience through written reports and briefs, data analysis

Number of students (min-max): 1
Estimated hours/week: 10-15 hours/week
Estimated project duration: 1-2 semesters
Metro Account needed(Y/N): Yes
Metro Laptop needed(Y/N): Yes
Working On-Site or Remotely: Hybrid-mostly remote

Title: Data Standardization Literature Review
Division: Center for Health Equity
Concentration area(s): Epidemiology

LMPHW Advisor: YuTing Chen
Project Supervisor: Felicia Pugh

PROJECT DESCRIPTION
Conduct a comparative literature review to describe standards for demographic and language data collection. The purpose of this project to create a document that would be used by an interdisciplinary LMPHW team to modernize and standardize department data practices. The output of this project would be a central document in that work.

GOALS/OBJECTIVES FOR THIS PROJECT
The end product will be an Excel workbook with defining the types of demographics or language used by a variety of public health organizations. Each element should have the minimum guidelines and practice required by the US Department of Health and Human Services, and 2 other sources for comparison.

A guiding document of relevant resources will be provided to the intern:
INVENTORY OF RESOURCES FOR STANDARDIZED DEMOGRAPHIC AND LANGUAGE DATA COLLECTION

REQUIRED SKILLS:
Critical reading and interpretation
Basic Excel – Ability to fill in formatted literature review spreadsheet

PREFERRED SKILLS:
Intermediate Excel – Ability to update formatted literature review spreadsheet with appropriate drop downs or rearrange for improved utility.

Number of students (min-max): 1
Estimated hours/week: 10 hours/week
Estimated project duration: 4 weeks
Metro Account needed(Y/N): No
Metro Laptop needed(Y/N): No
Working On-Site or Remotely: Remote

Title: Utilizing Spatial Data Science to Understand Health Status in Jefferson County, KY
Division: Center for Health Equity
Concentration area(s): Biostatistics, Epidemiology, Geographic and Environmental Sciences

LMPHW Advisor: YuTing Chen
Project Supervisor: YuTing Chen

PROJECT DESCRIPTION

Spatial data science allows analysts to extract deeper insight from data using a comprehensive set of analytical methods and spatial algorithms, including machine learning and deep learning techniques. This project will utilize CDC Environmental Justice Index, CDC Social Vulnerability Index as well as LMPHW health outcome data to explores the application of spatial data science to understand health status, uncover hidden patterns and improve predictive modeling in Jefferson County, KY.

GOALS/OBJECTIVES FOR THIS PROJECT

- Understand project datasets as well as how spatial data science helps uncover hidden patterns
- Use ArcGIS data engineering methods and visualization tools to prepare data for spatial analysis
- Gain hands-on experience performing suitability analysis, predictive modeling, space-time pattern mining and object detection.
- Communicate analysis results and insights using engaging and compelling ArcGIS StoryMaps.

REQUIRED SKILLS:

- Familiarity with statistics and/or epidemiology
- Basic skills of Literature review as well as Microsoft Office products

PREFERRED SKILLS:

- Experience of utilizing ESRI ArcGIS or other geographic information system tools

Number of students (min-max): 1
Estimated hours/week: 2-4 hours/week
Estimated project duration: 3 months or a semester
Metro Account needed(Y/N): Yes
Metro Laptop needed(Y/N): Yes
Working On-Site or Remotely: Remote