Assignment Description

This fellowship is located in the Assessment, Policy Development & Evaluation Unit (APDE) of PHSKC, an award-winning unit responsible for the core functions of community health assessment and evaluation for the Department. As such, we process and analyze several critical databases at the local, state and national level, including vital records, hospital discharges, surveys such as the Behavioral Risk Factor Surveillance System and the Healthy Youth Survey (local) or Youth Risk Behavior Surveillance System (national) given in public schools, the U.S. Census, American Community Survey and Public Use Microdata Sample (PUMS), local surveys (Communities Count and the Best Starts for Kids Health Survey), and the Pregnancy Risk Assessment Monitoring System (PRAMS), as well as use a statewide set of detailed population estimates. APDE has experience with policy development, policy evaluation, and providing data to monitor trends and disparities. In addition to performing regular surveillance, assessment and evaluation, other primary topics include equity and social justice, access to care, maternal and child health, violence/injury prevention, place-based initiatives to build healthy communities, evaluation of the Affordable Care Act, and chronic disease with emphasis on tobacco prevention and healthy eating/active living.

Recent evaluations include King County's menu labeling regulation impact on customers and restaurants, trends in youth obesity following large initiatives focusing on systems, policy and environment change addressing healthy eating and active living, and the impact of smoke-free housing implementation. APDE geocodes data to latitude and longitude and process data for use in other statistical programs, and routinely produce sub-county estimates at a neighborhood, city, zip, and/or census tract level. In addition, APDE creates routine maps of health conditions at a city and neighborhood level, focusing on place-based disparities.

Day-to-Day Activities

The CSTE Fellow's day-to-day activities may vary, but will primarily be spent working on one or more of the available projects. In the beginning of the fellowship, there will be a high emphasis on training to develop the necessary expertise to interact with the various datasets and the public and to successfully complete the projects. Both the primary and secondary mentors will be providing routine and regular supervision and contact.

A typical day could involve meeting with mentors, meeting with project stakeholders, analyzing and/or preparing data for dissemination, attending meetings focused on project outcomes, working towards publishing and presenting data, representing PHSKC and APDE in national, state or local groups, and interacting with epidemiologists (internal or external) or with community partners, hospitals, and the public. The Fellow will have opportunities to explore initiatives of interest during their tenure at PHSKC, determined after arrival. The day-to-day goals should culminate in enhanced
Competencies in public health, including assessment and analysis, evaluation, implementation of informatics to public health science, communication via reports, and cultural competency, resulting in a well-rounded epidemiologist ready to work at a state, local, or federal health agency.

Potential Projects

Surveillance Activity: Working to Improve the Health of Students - School District Health Reports

Building on partnerships with school districts to advance health and academic achievement, the School District Health Profiles provide assessment data for school districts to understand prevalence of health behavior among students and deliver information for school health and wellness improvement planning processes. The reports summarize key adolescent health behaviors (e.g. nutrition, physical activity, and tobacco use) by race/ethnicity, gender, grade and maternal education (proxy for socioeconomic status) within the school district in addition to district-level comparisons with the county and state. Reports are available online for seven of King County's 19 school districts (for details, see http://www.kingcounty.gov/depts/health/data/school-district-health-profiles.aspx).

The Fellow will have an opportunity to:
- gain experience in analysis of survey weighted data,
- cultivate relationships with school wellness program staff,
- develop skills in writing, data visualization, and communication of data to non-technical audiences, and
- see data inform school actions to improve the health of students.

This work would be carried out under the guidance of the secondary mentor with the expected products being completed reports for King County's other school districts and updated reports for the previously produced 7 school districts.

Surveillance Evaluation: Evaluation of Surveillance Systems for Children's Health

Public health surveillance of the overall health status of children is a fundamental capacity of public health departments, but data systems are limited at the local level. Under a new voter-approved levy, we are also investing in children and young adults through age 24.

This surveillance project will
- identify a key set of indicators that measure the major components of children’s health status, including any emerging topics (e.g. distracted driving, legalized marijuana in Washington State, health system transformation), starting with existing findings;
- evaluate the availability of these indicators at the local level
- provide suggestions to close information gaps and implement those activities
**Major Project  Community Health Needs Assessments to Inform Health System Transformation**

A collaborative of all 12 King County hospitals and health systems and PHSKC have been working together to conduct a joint community health needs assessment (CHNA), developing plans to address identified needs, and leveraging expertise and resources to address the most critical health needs in our county. A shared approach to community benefits can focus available resources on a community's most important health needs. The first joint needs assessment was completed in early 2015 and the next CHNA will be due in 2018. The Accountable Communities of Health is an effort to transform the health care landscape. This effort also requires a Regional Health Needs Inventory, which is heavily based on the CHNA. The Fellow will

- support the development of the 2018 CHNA and 2018 Regional Health Needs Inventory,
- assist hospitals in implementing activities in the community
- lead the evaluation of those community activities
- lead efforts around data dissemination, data translation, and community engagement

**Additional Project  Data Analysis**

Public Health-Seattle & King County's APDE Unit has a robust data request service. This service responds to at least 350 calls or emails requests each year. Questions can come from other Public Health-Seattle & King County staff, other branches of county or city government, legislators, community organizations, other states, media, and from the public. This provides invaluable experience due to the wide-ranging scope of topics and reasons for needing public health data, the connections that develop with other parts of the health department and county/city departments, data analyses on a variety of topics, creating maps, and the need to communicate clearly and succinctly with non-technical public and media. The Fellow will work in conjunction with other APDE epidemiologists. As a member of the Data Request Service, the Fellow will gain mastery over vital statistics annual datasets, population-based weighted surveys, cancer registry data, Census and American Community Survey data, hospitalization data, and non-technical communication and data interpretation methods.

**Additional Project  Training Curricula, Data Dissemination, Health Equity**

Training curricula: Fellows will have the opportunity to participate in the formal training curricula of the PHSKC-Epi Scholars program. This summer program includes a meeting with the Director and Health Officer, and workshops and hands-on training on 12 topics including an overview of surveillance activities at PHSKC, GIS training, grant writing, how to give effective presentations, public health emergency risk communication, and tours of public health programs that directly serve clients.
(e.g. needle exchange and jail health) to understand all the activities of this large metropolitan public health department. This formal training will take place during the fellow's first summer, and will be in addition to ad hoc training opportunities.

Data dissemination is a key theme throughout the work of this PHSKC unit and would be integrated into the fellow's work on the projects below. The CSTE fellow would be trained in and develop expertise in several new data dissemination techniques and data visualization techniques. We are using data visualization techniques such as Tableau and development of infographics. We are also ensuring that local communities have a voice in the interpretation of population health analyses, and the fellow would also be involved with working with communities and integrating their experiences into dissemination products.

Health Equity: A unique aspect of the training at this site is the focus on health equity. Our unit and agency has a strong commitment to social justice and we approach data with a health equity lens in order to work towards greater health equity throughout our county. The fellow will have the opportunity to explore health issues using an equity lens, gain understanding of the social determinants of health and learn about building healthy communities through cross-sectoral policies, systems and environment change strategies. To learn more about King County's Equity and Social Justice Initiative, please visit: http://www.kingcounty.gov/elected/executive/equity-social-justice.aspx.

**Preparedness Role**

Public Health is the lead agency for addressing health, medical and mortuary issues resulting from all hazards. Public Health coordinates with regional partners to enhance and sustain critical capabilities under the umbrella of Emergency Support Function 8. As a department we have responded to over 50 emergencies since the program inception in 2001. In additional to responding to a large number of small and large-scale communicable disease outbreaks (Legionella pneumonia, E.coli, salmonella, measles, tuberculosis), examples of emergency responses include:

- **SR530 landslide in Snohomish County** where Public Health Reserve Corps volunteers worked with the Snohomish Sauk Seattle-Suiattle Clinic to provide medical care to members of the tribe who were isolated due the landslide.
- **Ebola crisis** where Public Health coordinated and trained hospitals, providers and other partners to be ready for an Ebola response. Public Health kept the public and local leaders informed on the emerging issues by fielding heavy local and national media daily and updating frequently on social media. Public Health provided support to jurisdictions across the county outside of the health fields, such as providing direction to law enforcement officers and superior court judges who wanted to know about their role in isolation and quarantine.
- **Aurora bus crash** during which five people were killed and at least 64 were taken to area hospitals after a charter bus, a "Ride the Ducks" tour vehicle, crashed containing students and staff from a local college. Public Health responded through mass fatality and family assistance support and collaborated with 2-1-1 to establish a call line to provide information to family members.
Public Health Preparedness has several innovative, award winning programs, including the Public Health Reserve Corps (PHRC). The volunteer program is comprised of 800+ volunteers representing a variety of medical and non-medical professions and come from all walks of life and backgrounds. The PHRC program has been the recipient of the 2012 Ambassador Award from the Surgeon General (MRC), the 2013 Shining Start Award from the King County Nurses Association, 2015 Mentor Award from Assistant Secretary of Preparedness and Response (ASPR), 2016 National Health Security Award from ASPR. In 2015, seven volunteers received the Bronze Award for serving 100-249 hours in a year. In total, seventeen PHRC volunteers have received Presidentâ€™s Volunteer Service Awards.

The Community Resilience + Equity Program (CR+EP) is another innovative program that works collaboratively with community partners, identifying and addressing system gaps, and aligning interests and efforts, to build community resilience and ensure that no one group is more impacted than another in an emergency. With a focus on building relationships with community leaders and community based organizations, the program has worked with over 500 organizations and individuals on that list on resiliency efforts. CR+EP is also addressing climate changes and through a Public Health Institute grant is developing a department-wide blueprint to address climate change.

The Fellow will liaise with Public Health Preparedness Section through:

- Providing support during emergency responses--serving in the emergency operations center and practicing during drills
- Connecting with other public health programs as appropriate
- Providing data support to inform the development of response plans

**Additional Activities**

Other Potential Projects

The Fellow will also have the opportunity to work on other projects and with other units (e.g. health eating, active living; tobacco prevention; injury and violence prevention; emergency medical services, environmental health) within PHSKC. Depending upon the particular interests of the Fellow and departmental priorities, other projects may be developed over the course of the fellowship. Some additional major areas of work for our unit include

- Best Starts for Kids, a voter-approved initiative to improve the health of children by focusing on prevention
- Relationship between Housing and Health- understanding that the two sectors are intertwined, we have several projects that work at this intersection
- Other innovative systems-building and methodologic development

See more about the kinds of work we do at [www.kingcounty.gov/health/data](http://www.kingcounty.gov/health/data)

**Mentors**

**Primary**

Eva Wong, MS, PhD
Epidemiologist

**Secondary**

Myduc Ta, MPH, PhD
Epidemiologist