Theme: **Healthy Environments**  
2021-2022

**Background**
The Global Health Equity Scholar will be responsible for completing assigned activities assigned under the mentorship of Dr. Peter Winch and Dr. Johannes Urpelainen.

Ambient (outdoor) air pollution (AAP) is the result of both natural processes (volcanoes, dust storms) and human activity. AAP generated by humans is steadily increasing in cities and in low- and middle-income countries. Drivers of urban AAP include motor vehicles and transport terminals (ports, airports, bus stations); energy production; industry; emissions entering cities from agricultural burning in surrounding rural areas; and emissions from homes that cook with biomass (wood, charcoal, or cow dung).

Primary Air Care (PAC) is a package of interventions to reduce harmful emissions. PAC acts against the sources of emissions to reduce AAP and greenhouse gases. In contrast to other climate change initiatives, PAC focuses on human health outcomes to both reduce the impact on vulnerable populations and promote health equity, and to mobilize action to reduce all emissions through increased awareness and understanding of health impacts. PAC works to put into practice the modeling work by Van Dyck et al. demonstrating that “air quality co-benefits on morbidity, mortality, and agriculture could globally offset the costs of climate policy.” You can learn more about the theme on our website.

**Scope of Work**
Specific responsibilities may include, but are not limited to:

- Assist in data extraction and analysis for sub-reviews of a larger scoping review
- Assist in data extraction and analysis for heat intervention scoping review
- Assist in a small review of social, cultural, and economic factors contributing to burning in urban and rural areas, and interventions to reduce burning of trash, crop stubble, and industrial burning
- Assist in the planning, organization and day-of activities of a university-wide research symposium on transportation interventions, to include: emissions, road safety, electric vehicle replacement, active and public transport, and air travel
- Aid in AHW’s search for funding to begin implementation of PAC in cities in low- and middle-income countries. Our focus is on Delhi, India; Bamako, Mali; and Lima, Peru.
  - Research the specific outdoor air pollution concerns unique to the cities listed above, or other cities where we identify opportunities
  - Development of concept papers on implementing PAC in identified cities
The GHES position requires a minimum commitment of 10 hours per week. Questions can be directed to Divina Varghese.