Propositions

1. Small area estimation models can be used to generate reliable estimates of risk exposures, health outcomes, and longevity at the county level in the United States. *(this thesis)*

2. Corrections for known biases in existing data sources can be implemented alongside small area estimation models, improving the face-validity of the resulting estimates. *(this thesis)*

3. Spatial-temporal patterns of mortality rates in the US vary substantially by cause of death. *(this thesis)*

4. Geographic inequalities in life expectancy among counties in the US have increased since the 1980s, primarily as a consequence of increasing inequalities in mortality risk during middle and older ages. *(this thesis)*

5. Variation in socioeconomic factors, behavioral and metabolic risk factors, and health care access and quality factors can explain most of the variation in life expectancy among counties in the US. *(this thesis)*

6. Accurate estimates of under-5 mortality can be calculated based on summary birth history data collected in surveys and censuses. *(Rajaratnam et al., PLoS, 2010)*

7. Cluster analysis is a useful tool for identifying and describing segments of the population with distinct risk profiles or health care utilization patterns. *(McAloney et al., Preventive Medicine, 2013 and Vuik et al., Population Health Metrics, 2016)*

8. Permanent supportive housing services increase housing tenure and reduce emergency room visits and hospitalizations among individuals with mental and substance use disorders who are homeless. *(Rog et al., Psychiatric Services, 2014)*

9. Supervised injecting facilities have the potential to reduce the risk of death from overdoses, reduce the risk of disease transmission, and increase uptake of detoxification services. *(Wood et al., Canadian Medical Association Journal, 2006 and Marshall et al., The Lancet, 2011)*

10. Software development best practices can empower researchers to write code more efficiently, improve reproducibility, and minimize the likelihood of errors. *(Wilson et al., PLoS, 2014)*

11. It is our choices that show what we truly are, far more than our abilities. *(JK Rowling)*