To Do List

* Literature review document with paper summaries
* Calculate expected lung cancer frequencies based on the US population to see how TX compares?
* Analyze the data from the TCR through the data tables & definitions files
* Read dashboard and R shiny chapters of *Geospatial Health Data*
* Research on R shiny/ visualizations/ dashboards for COVID-19
* Research poisson/ other modeling of disease rates
* Complete INLA smoothing of the final maps
* Create models using INLA that incorporate some of the other county-level data

*Completed by 7/10/20*

* Researched & selected histologic codes for each “type” to be included in analysis
* Extracted lung cancer frequencies by demographic and/or county from SEER\*Stat software
* Tutorial on R shiny dashboard/ begin final dashboard
* Created plan for incorporating/ analyzing COVID-19 mortality rates

*Completed by 7/3/20*

* Read & created R code for chapter 7 of *Geospatial Health Data*
* Learned recodes for different variable names in SEER\*Stat software
* Complete general analysis plan/ overview
* Collected & cleaned census data for TX for 1995, 2000, 2005, 2010 & 2015
* Calculated SIR’s for 1995, 2000, 2005, 2010 & 2015 for each TX county by demographic group

*Completed by 6/26/20*

* Learn how to calculate age-adjusted rates
* Analysis literature review
* Extracted data & incidence/ summary statistics from SEER\*Stat TCR cancer data
* Analysis plan ideas
* Read & created R code for chapter 6 of *Geospatial Health Data*

*Completed by 6/19/20*

* Studied & played around with R-INLA
* Significant portion of literature review
* Preliminary analysis ideas
* Learned SEER\*Stat software
* Further investigated histologic types of lung cancer and Texas data regarding it
* Learned about spatial span statistics

*Completed by 6/12/20*

* Start analysis plan & write down preliminary ideas
* Significant portion of literature review
* Tutorial for creating R-Shiny apps on R Studio website
* Collect COVID-19 data from Texas DSHS
* Set up GitHub

*Completed by 6/5/20*

* Complete project plan
* Collect cancer data from CDC and TCR
* Read section 1 (Geospatial health data and INLA) of *Geospatial Health Data*
* Read chapter 7 (spatiotemporal modeling of areal data. Lung cancer in Ohio) of *Geospatial Health Data*
* Further research INLA and R package
* Practice using CRS’s and spatial data