**HOMEWORK 4: STRUCTURED DATA + MODELS**

Problem descriptions are given in the class [exercise sheet](https://github.com/krisrs1128/data_visualization_exercises/blob/main/exercises.pdf).

Please submit an .html file and the R Markdown code used to generate it. Failure to submit both files will lead to deductions to your score.

**Coding**

* Geospatial Datasets [3 points]
* CalFresh Comparison [3 points]
* HIV Network [3 points]
* Beijing Air Pollution (part a only) [2 points]
* Food Nutrients [3 points]

**Discussion**

* Code Diary (start this before the other exercises) [3 points]
* Concept Map [3 points]. You may choose any week after week 7.

**Grading Criteria**

Each problem will be graded on the following criteria where relevant:

* **Attention to detail in visual design.** Your designs should go beyond defaults show critical thinking, and guide viewers towards meaningful takeaways. Plots that show minimum effort or make choices that hinder the viewer will be penalized. Carefully consider design and style choices (e.g., encodings, annotation, themes, and colors).
* **Code style.** The code you use to implement your visualizations should be readable and well-organized. Reproducibility is extremely important in data visualization, and messy code is a barrier to it. Organize your code well – this helps iterative design.
* **Thoughtful explanations, interpretations, and justification.** Writing should be thorough and avoid jargon. Writing should draw organically from one’s own experiences, opinions, or relevant sources.
* Finally, the **.html file should be organized and formatted well**. Please take care to ensure that in your knitted .html file, we can clearly identify where each problem starts and ends, and things like R warnings and messages are hidden. **Make sure your code and visualizations are visible in your .html file BEFORE you submit!**