Day 5 Worksheet

Scientific Communication

In science one of our challenges is presenting our data so anyone could understand it. Often, we will make infographics or posters that communicate the main ideas that we are trying to convey. When creating your infographic/poster try to keep your text to the minimum, but make your data visualization (graphs) clear and easy to read. Keep your infographics very visual with as few words as possible. If you are making a poster you might want to include these 4 main sections to highlight what you did and why:

1. **Introduction**- *(1-3 sentences)*. Present the topic. Tell your reader some background, do your best to highlight why this type of data is important.
2. **Methods**- *(1-2 sentences).* How did you do the analysis? Describe where you got the dataset, what type of data is included and what program you used to do your data wrangling.
3. **Results**- *(graph or table).* This is where you would show the results of your analysis, typically we use graphs and tables to highlight our results. Make sure your graph is clear and easy to read. What are the axes showing? Include a caption that explains the most important features of the data.
4. **Discussion**- *(1-3 sentences)*. Explain why your results are important. What did your analysis show? Highlight why these data are important.

For today’s activity I want you to take a graph you have made (or create a new one on the biology topic of your choice using R). Then you should create a poster/infographic that explains your data. Be creative, this is a visual format so include pictures and background that highlight what you are showing in your graph. Use as few words as possible, but make sure the page is a stand alone product that anyone could understand. Be clear, try to avoid unnecessary elements that are distracting, a great graphic is simple but communicates your science in a way that is easy to understand.

There are multiple websites that we can use to help us build a professional looking poster/infographic. Here are a few that I like but feel free to choose any program you prefer:

1. **Biorender**- This website is great for making complex graphics in biology. It has a bunch of pre-made illustrations and templates you can modify to communicate your science. <https://www.biorender.com>
2. **Piktochart**- A great website for integrating graphs with text. This website has a bunch of poster templates that can be used to create an informative infographic. <https://piktochart.com>
3. **Canva**- A great website for creating posters with photos and text. <https://www.canva.com>

Make sure that you see me before you print your graphic. You can take your print out home to show your family/friends the type of research that you did during this class!