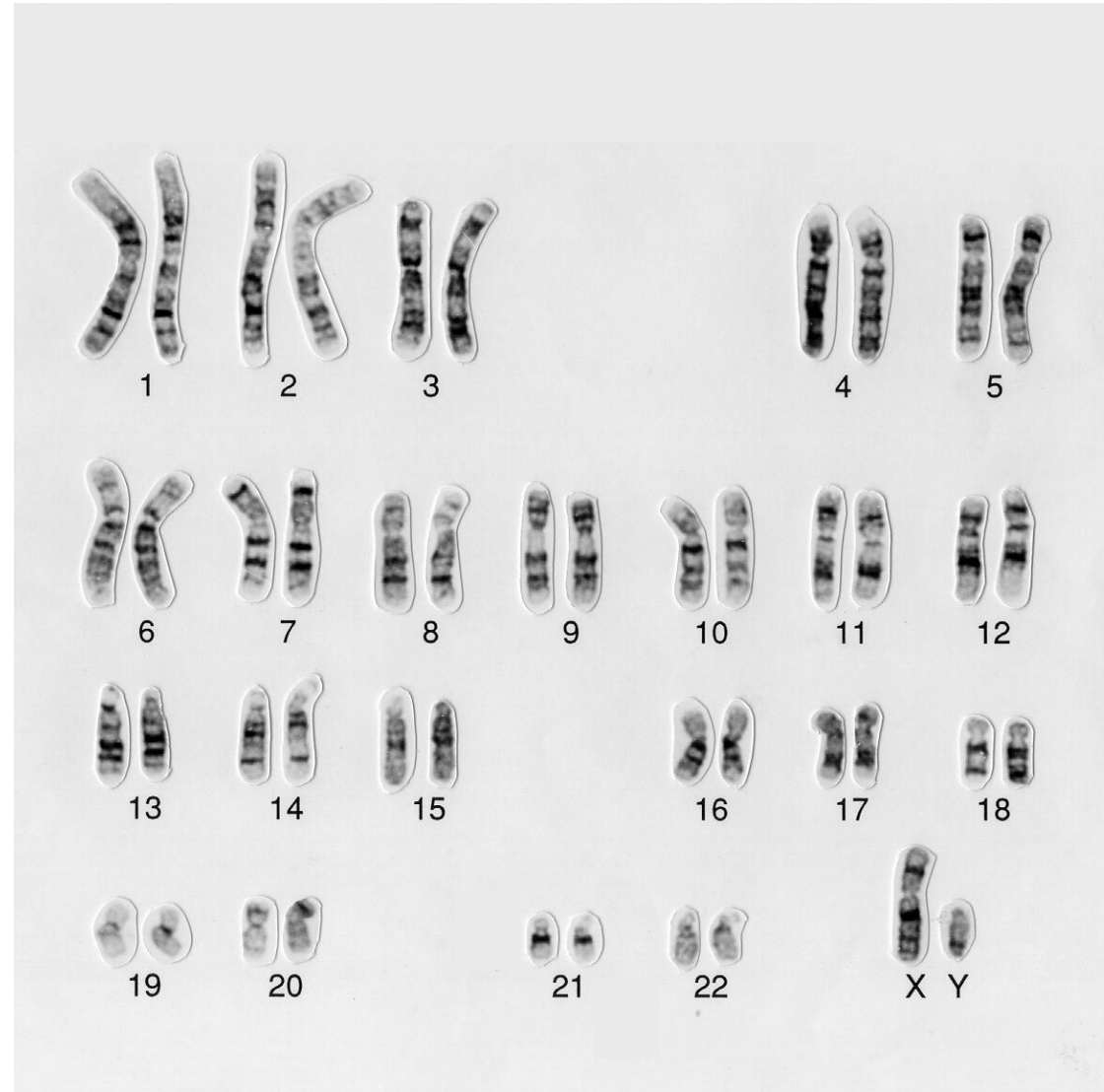


Designing Copy Number Visualizations

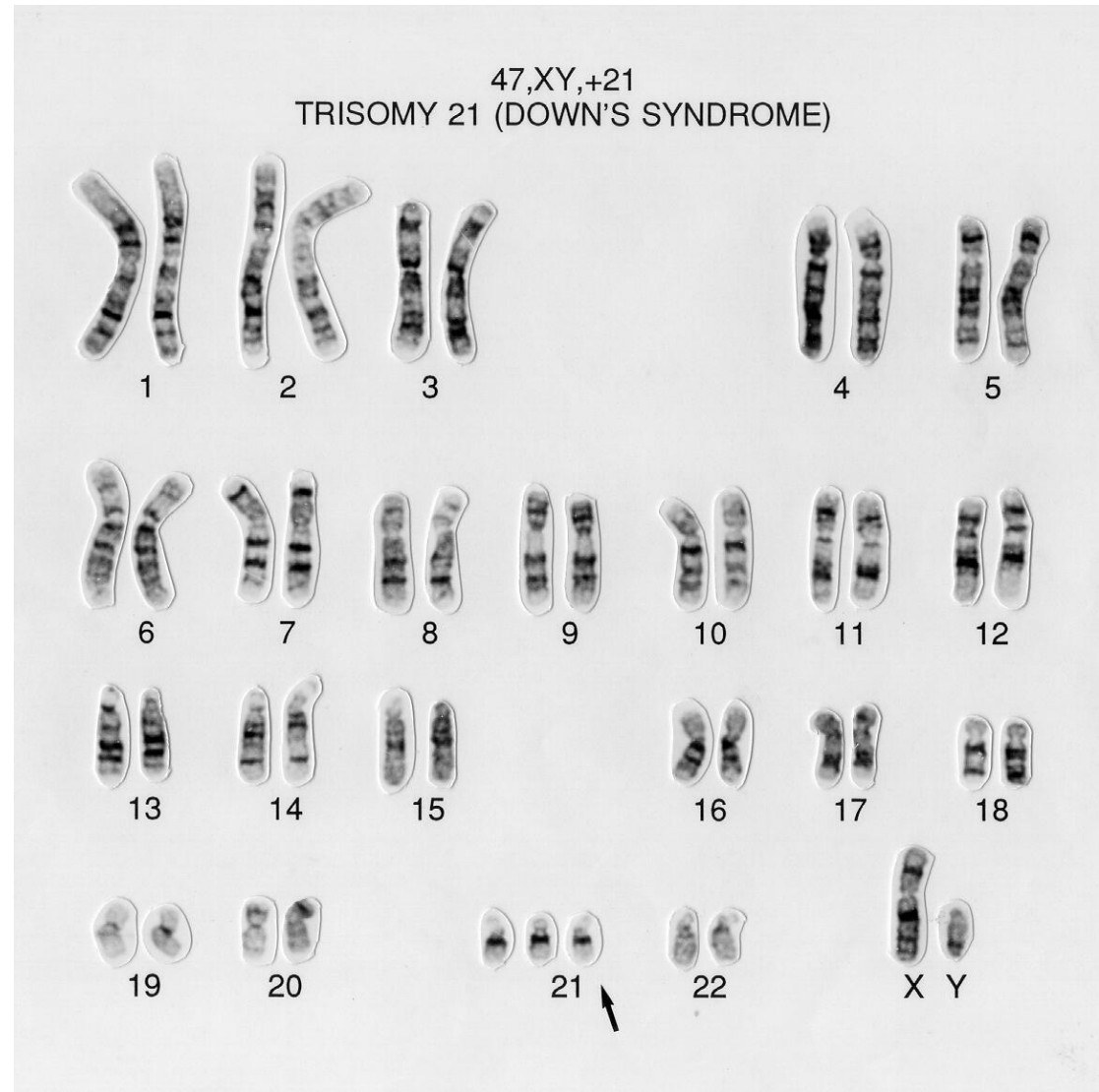
Rladies Philly Lightning Talk

2022-06-08

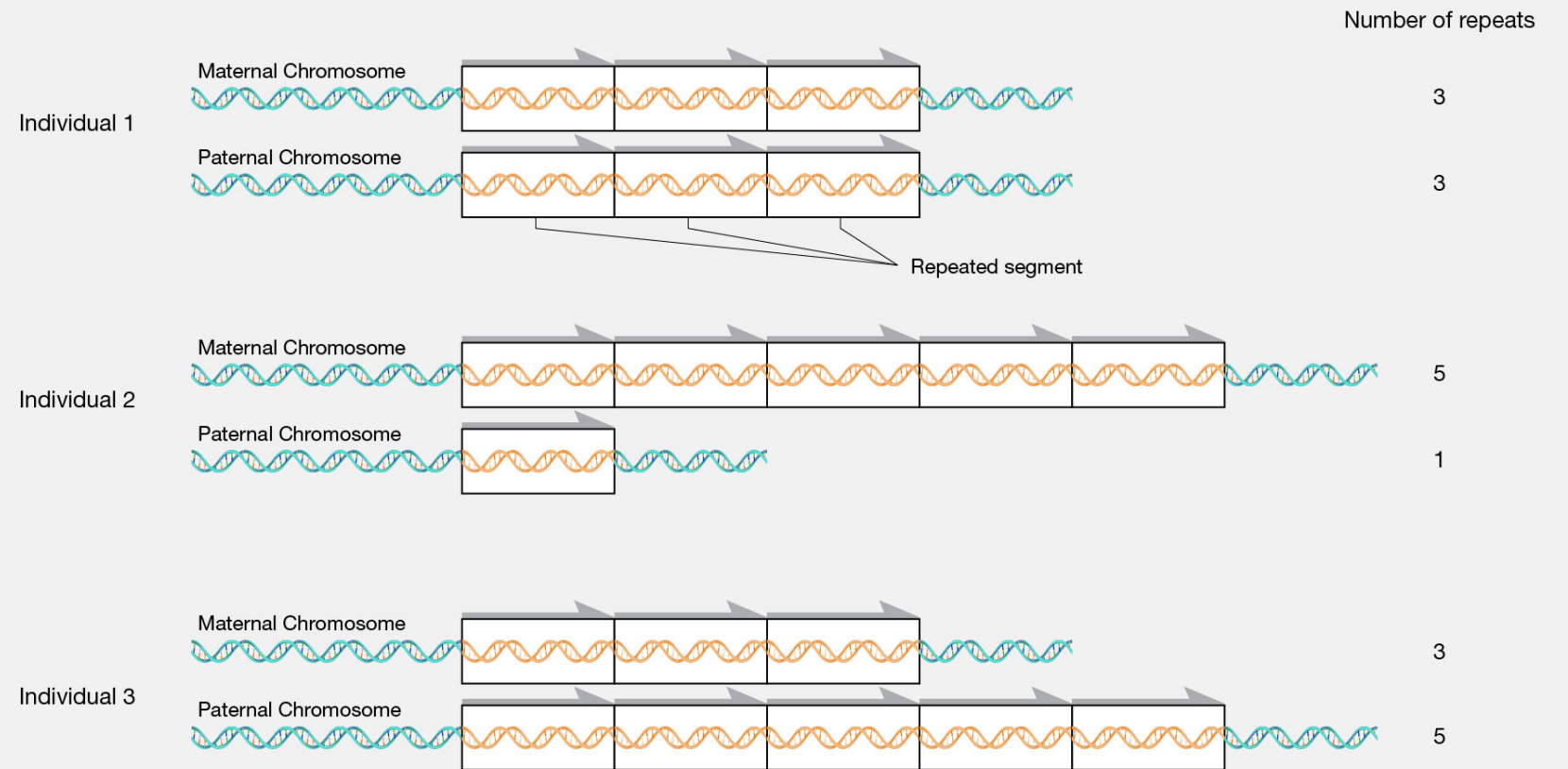
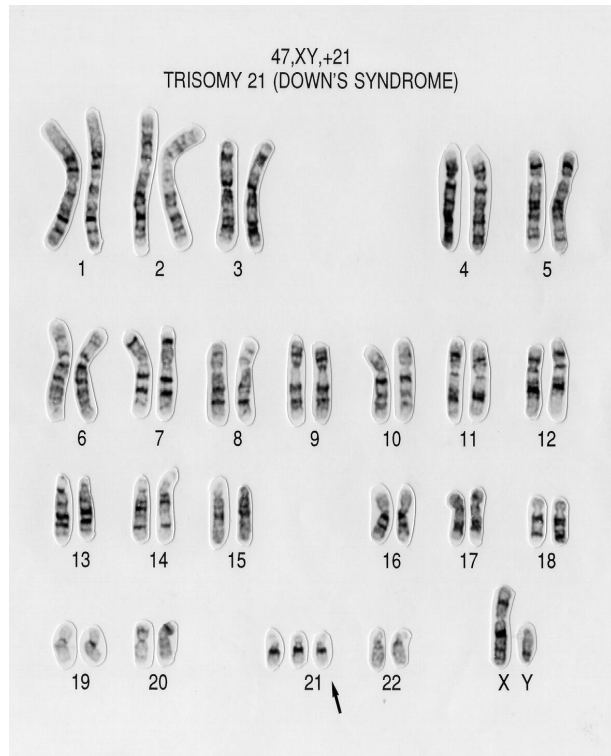
Copy Number Variants (CNVs)



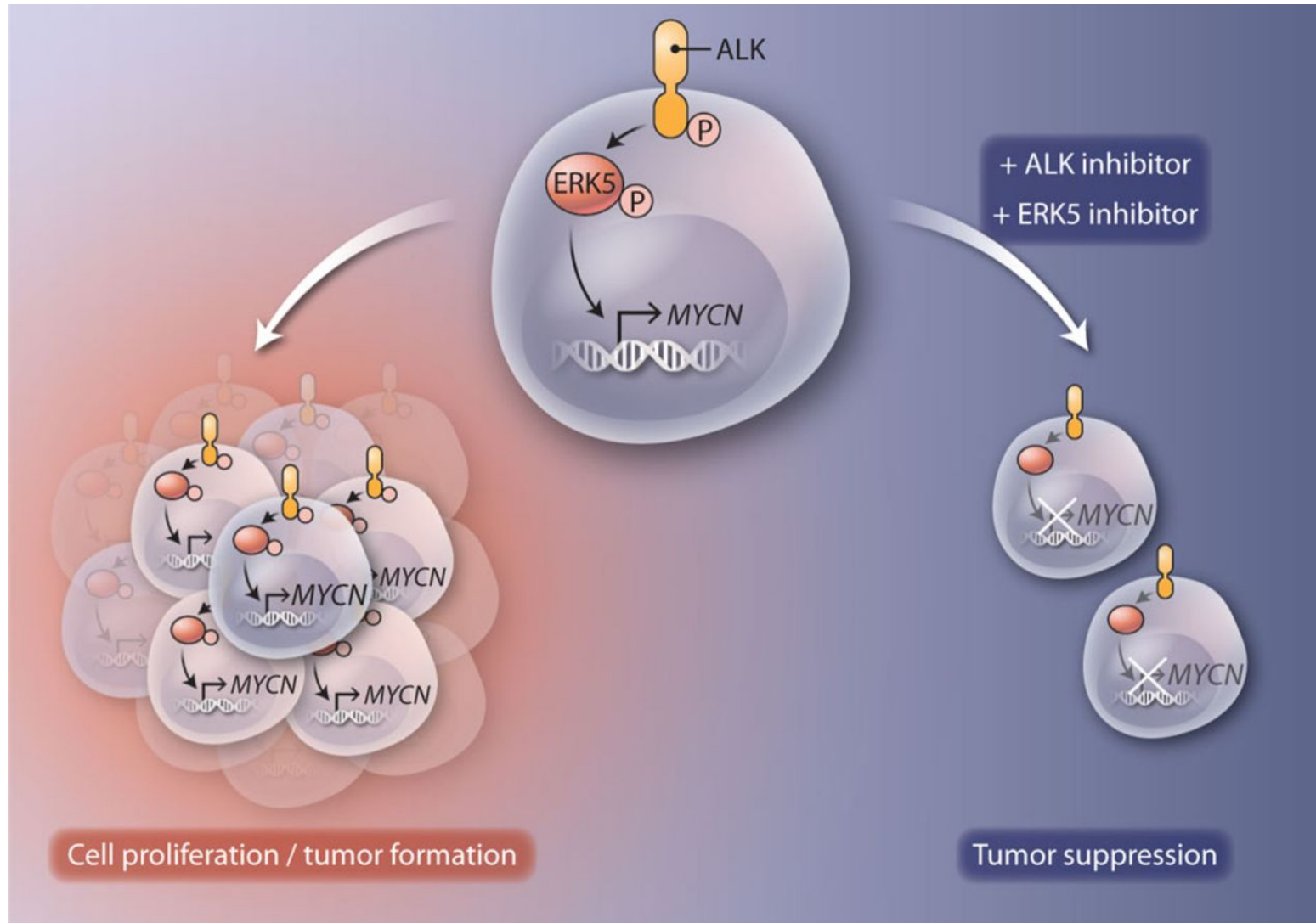
Copy Number Variants (CNVs)



Copy Number Variants (CNVs)



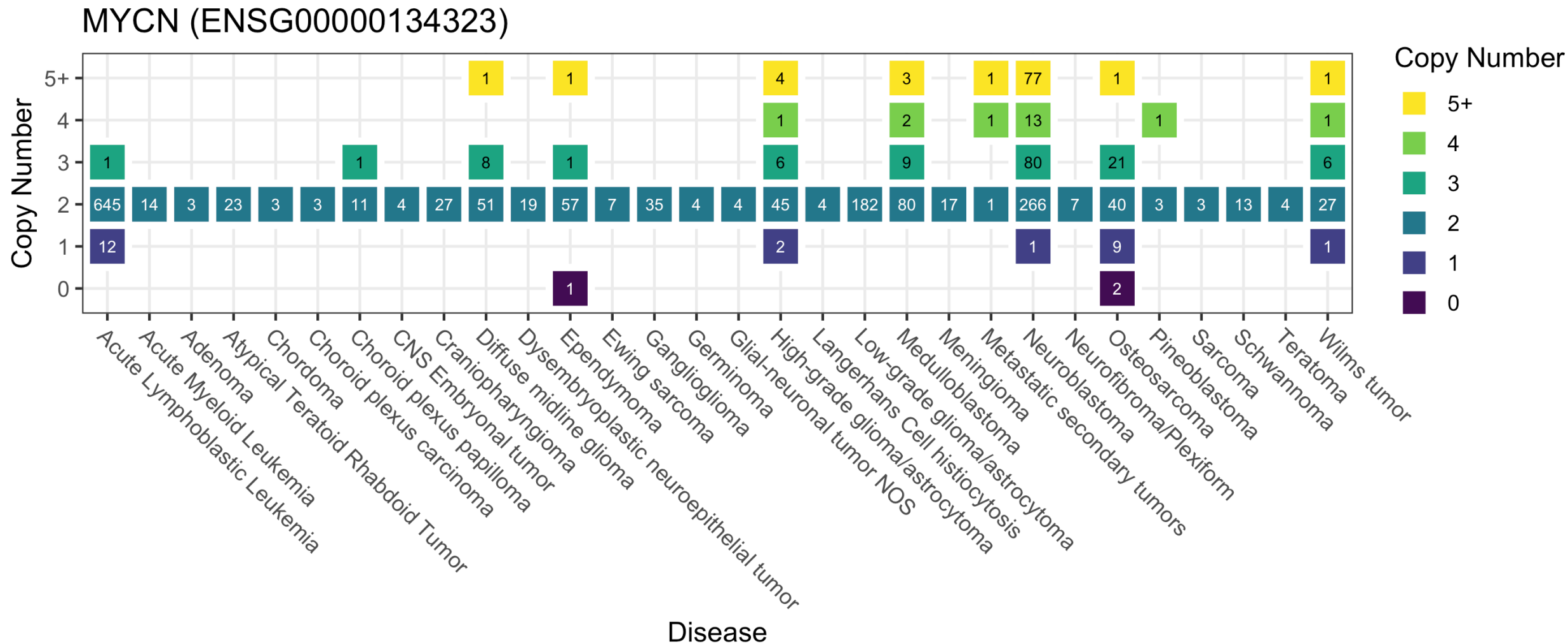
CNVs and Cancer



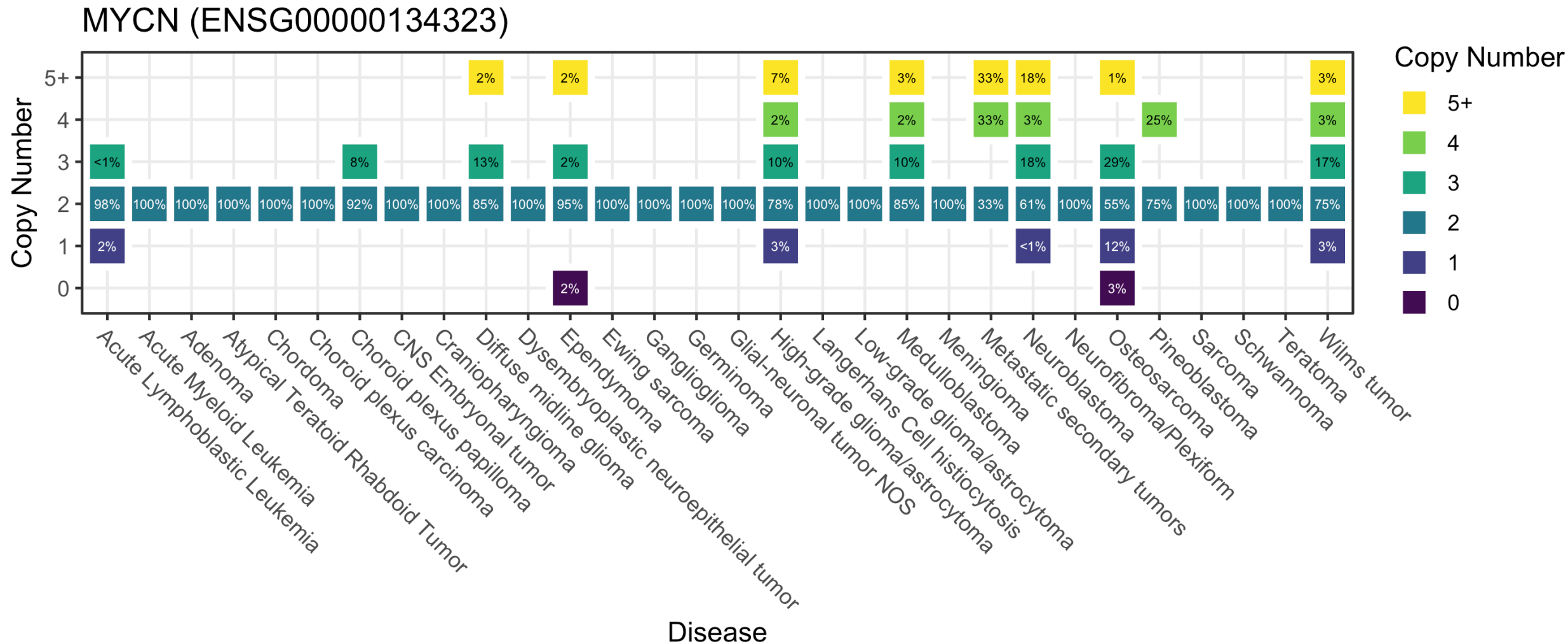
Challenges of Visualizing Genome-Wide Data

- **Size:** Anywhere from thousands to billions of measurements per sample
 - Hard to visualize individual measurements
 - Physical size of the data can be challenging for R to handle
- **Variability:** Even samples from the same organisms can vary based on sampling conditions

Gene View – Summarization and Scaling

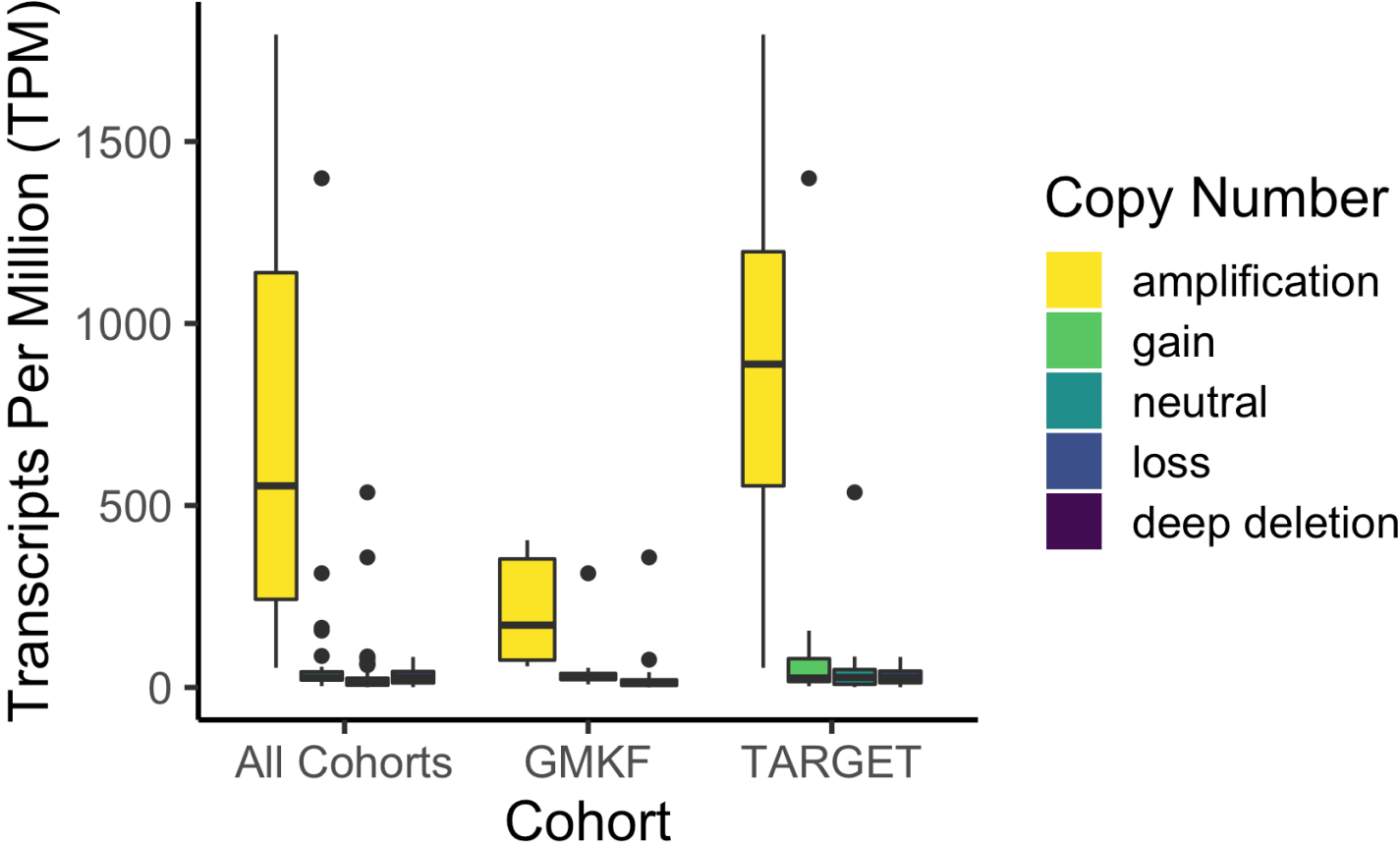
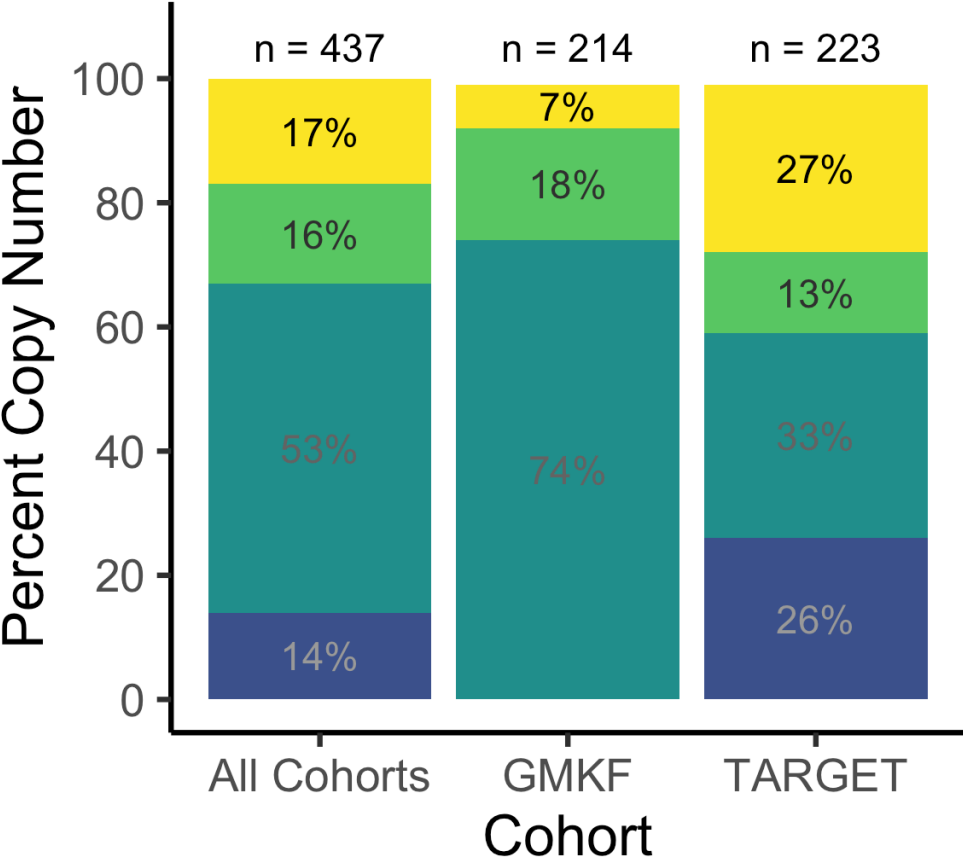


Gene View – Summarization and Scaling

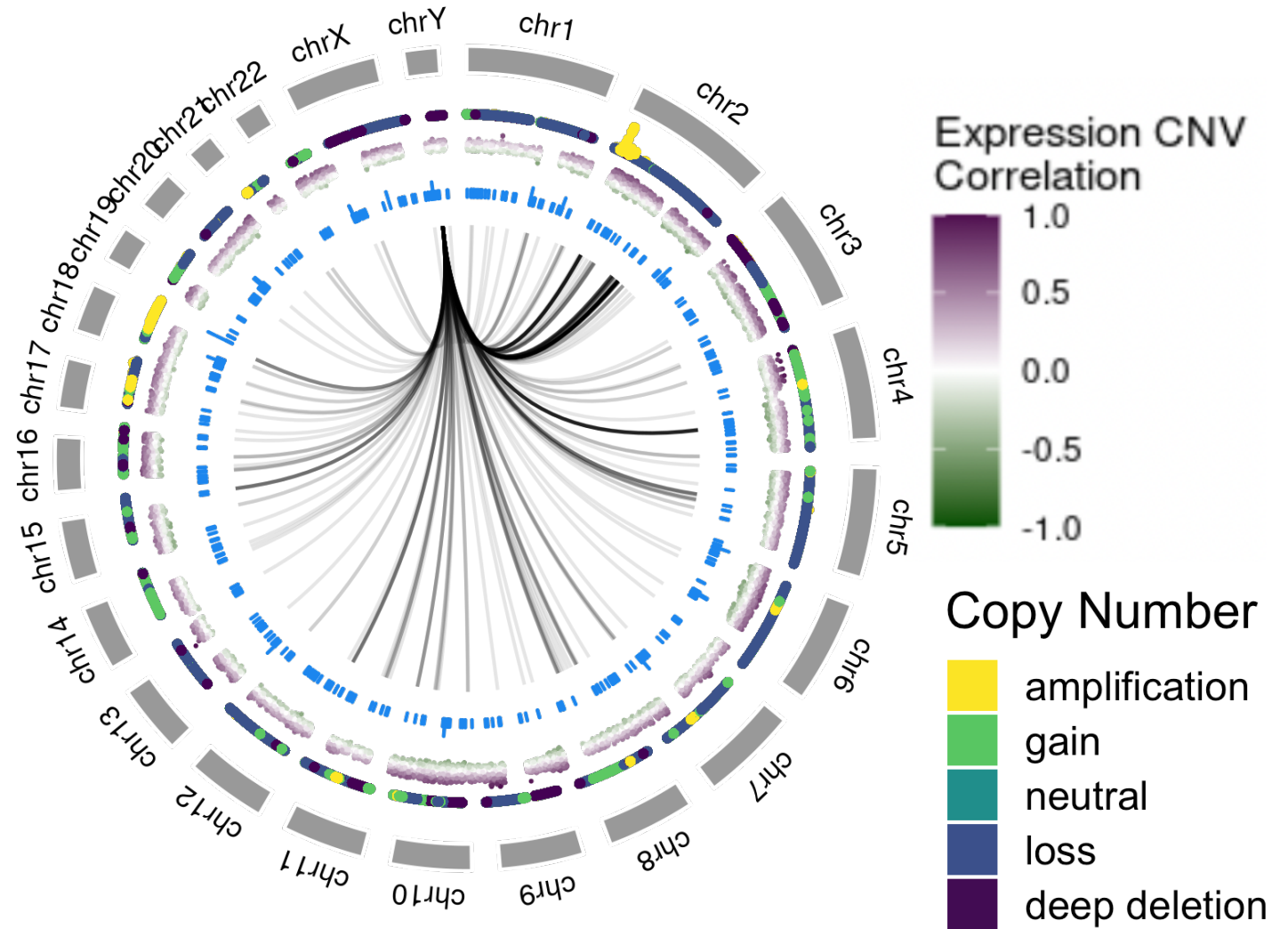


Evidence View – Subsetting and Combining

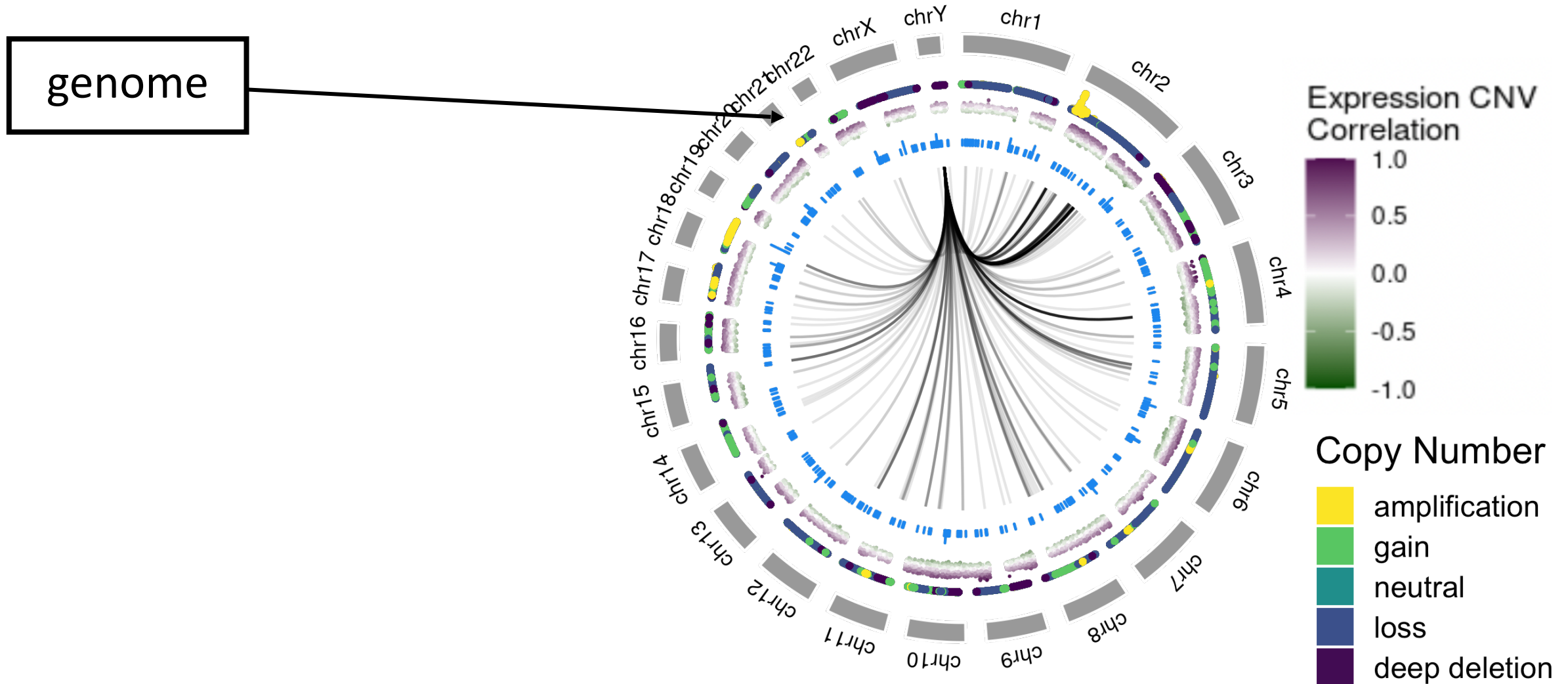
Neuroblastoma: MYCN (ENSG00000134323)



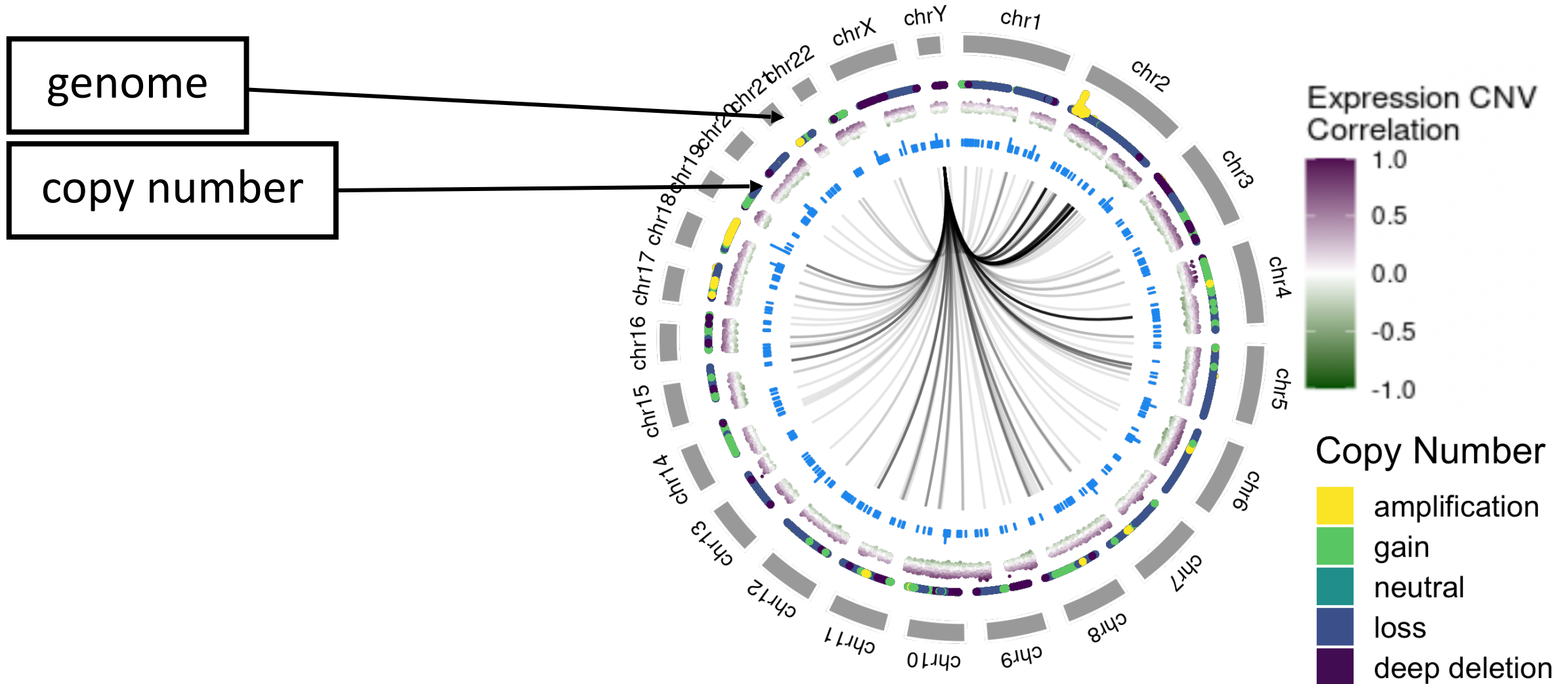
Disease View – Whole Genome Visualization



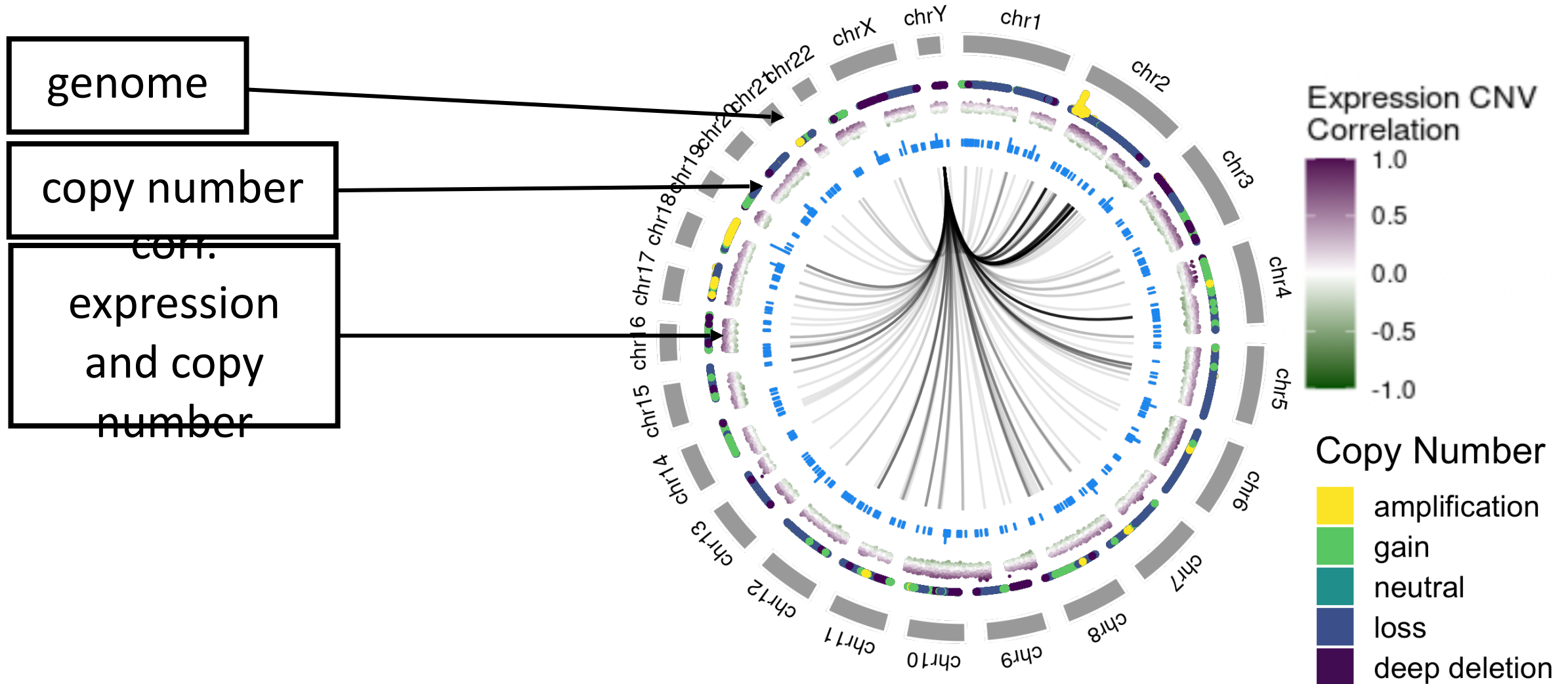
Disease View – Whole Genome Visualization



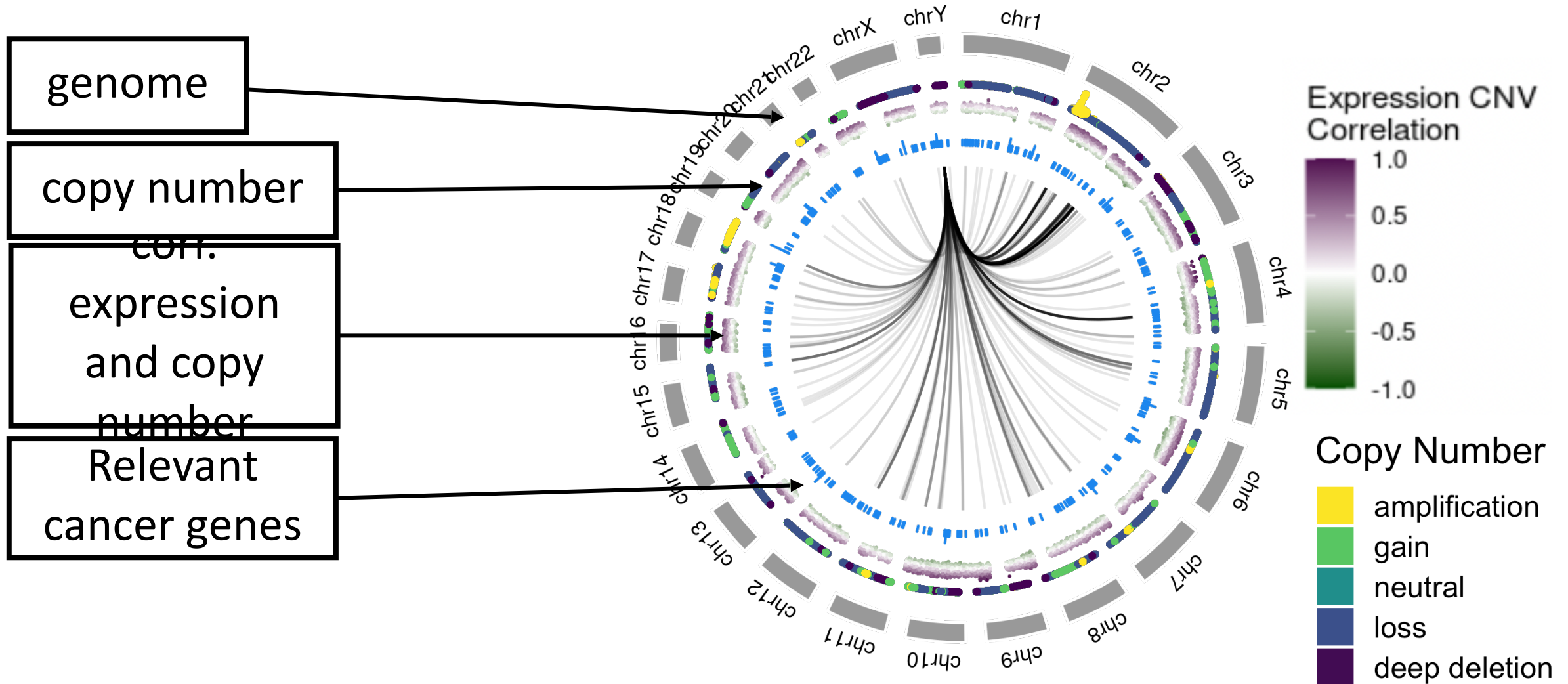
Disease View – Whole Genome Visualization



Disease View – Whole Genome Visualization



Disease View – Whole Genome Visualization



Disease View – Whole Genome Visualization

