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Introduction
• Hepatitis B infects around 300 million people worldwide and kills 600,000 per year
• Although an effective vaccine is available, HepB is currently incurable after infection

Objective of the Study
Hepatitis B is caused by the HBV virus, which is made up of cccDNA. The aim of my research project was to develop a better way to analyze the cccDNA.

Methods
• Infected hepatocytes with HBV and either H2A or H2B plasmid
• Lysed the cells
• Performed Co-ip to isolate HBV cccDNA

Results
• Look for HBV cccDNA in isolated histones
• cccDNA was present in one iteration of the experiment
• Tried to replicate, but results were negative, most likely because the HBV infection in hepatocytes was not robust enough

Questions for further research
• Can we engineer a similar plasmid for HBx, a viral HBV protein?
• How can we optimize the experimental protocol to produce a better yield of cccDNA?

Conclusion
• The science behind the experiment is sound, but further attempts are needed to optimize the experiment

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