Cornell Guided Notes

Genetics of Disease (Medical Interventions) | 2026-10-29

Name	Period	Date	Lesson
		2026-10-29	

Lesson focus

Microarray report submit

Key words and questions	Prepared details and student notes
Essential question **What is today's target?**	Finalize and submit your microarray analysis report connecting expression data to disease risk. Big idea: What does a complete, data-anchored scientific report look like in genomic medicine? **My notes, examples, and questions**
Key words **What vocabulary unlocks the lesson?**	- gene expression - mRNA - upregulated - downregulated - correlation - risk - diagnosis **My notes, examples, and questions**

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Cornell Notes - Continued

Key words and questions	Prepared details and student notes
Must-know ideas **What should I understand by the end?**	- Every claim in a scientific report must trace to a specific data value; unsupported claims weaken credibility. - Revising with feedback improves precision; a common error is using vague language ("the gene went up") instead of quantified language ("fold change of 3.2"). - Gene expression analysis contributes to the Molecular and Genetic Technology domain of the WebXam 072130. **My notes, examples, and questions**
Process notes **What happens during class?**	- 0-15: Revise risk-vs.-diagnosis sentence using peer or teacher feedback from Thursday - 15-45: Assemble fold-change table, heat map, and claim into one report document - 45-60: Self-check: verify each claim points to a specific data value - 60-72: Peer review: partner checks one claim for data support - 72-78: Final edits; submit microarray analysis report - 78-80: Teacher confirms receipt; preview gene-therapy unit **My notes, examples, and questions**

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Key words and questions	Prepared details and student notes
Steps and evidence **What do I do and turn in?**	- Combine your fold-change table, heat map, and claim into one report. - Revise your risk-versus-diagnosis sentence using one piece of feedback. - Check that every claim in the report points to a value in your data. - Submit your microarray analysis report for the week-end summative. Evidence: Lab report - Complete microarray analysis report: fold-change data table, shaded heat map, and CER claim distinguishing disease risk from diagnosis. **My notes, examples, and questions**
Checks for understanding **How do I know I got it?**	- You'll be able to produce a complete microarray analysis report. - You'll be able to support each claim with expression data. **My notes, examples, and questions**
Lab or safety notes **What must I handle carefully?**	Supplies: - Classroom computer or laptop - Spreadsheet software (Google Sheets or Excel) - Teacher microarray expression dataset - Heat-map color key handout - Calculator or spreadsheet formula bar **My notes, examples, and questions**

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Summary

Today's lesson focused on Microarray report submit. The main target was: Finalize and submit your microarray analysis report connecting expression data to disease risk. The evidence of learning is Lab report: Complete microarray analysis report: fold-change data table, shaded heat map, and CER claim distinguishing disease risk from diagnosis.. In my own words, the most important idea from today is:

My summary

My final question or connection