

Cornell Guided Notes

Genetics of Disease (Medical Interventions) | 2027-04-05

Name

Period

Date

Lesson

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

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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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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