

Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-10-20

Name

Period

Date

Lesson

Lesson focus

Submit diagnosis evidence

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Submit your transcription-translation model and mutation analysis CER to the unit tracker.
Big idea: A complete DNA-to-protein packet traces the molecular chain from a single base change in DNA to a potential clinical diagnosis, demonstrating the power and limits of the central dogma.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- DNA
- chromosome
- gene
- allele
- protein
- transcription
- translation
- mutation

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?

- A submitted transcription-translation model must show both the original and mutated sequences to be a valid comparison; without both, the change cannot be evaluated.
- The mutation variable must be identified explicitly: which base position changed, from which nucleotide to which nucleotide.
- Self-assessment at the end of this unit is also an assessment of your understanding of the central dogma: can you trace each step from DNA to protein to disease?

My notes, examples, and questions

Process notes
What happens during class?

- 0:00: Project the tracker checklist; walk through each required item
- 0:10: Work time: upload transcription-translation model (original and mutated sequences); verify mutation variable is labeled
- 0:28: Work time: upload Thursday CER; verify sequence evidence is cited and a diagnosis connection is stated
- 0:45: Confirm mutation variable and model limitations are documented
- 0:58: Self-assessment form: check each success criterion; flag any item not fully met
- 1:08: Course-closing reflection: in one sentence, how does the central dogma connect a genetic mutation to a medical diagnosis?

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Review the tracker checklist for decoding-a-diagnosis deliverables.
- Upload your transcription and translation model.
- Attach your mutation analysis CER.
- Confirm the mutation variable and limitations are documented.
- Self-assess against success criteria and flag gaps.

Evidence: Tracker entry - Complete DNA-to-protein packet: transcription-translation model with original and mutated sequences labeled, Thursday CER with sequence-comparison evidence and diagnosis connection, mutation variable and limitations documented, and self-assessment form.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- I can submit a complete DNA-to-protein packet.
- I can verify my work against a checklist.

My notes, examples, and questions

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Lab or safety notes
What must I handle carefully?

Supplies:

- DNA-to-protein modeling kit or paper nucleotide cutouts
- Codon (amino acid) chart
- Chromosome and gene diagram
- Colored markers for base pairing
- Lab notebook for the model and mutation trace

My notes, examples, and questions

Summary

Today's lesson focused on Submit diagnosis evidence. The main target was: Submit your transcription-translation model and mutation analysis CER to the unit tracker. The evidence of learning is Tracker entry: Complete DNA-to-protein packet: transcription-translation model with original and mutated sequences labeled, Thursday CER with sequence-comparison evidence and diagnosis connection, mutation variable and limitations documented, and self-assessment form.. In my own words, the most important idea from today is:

My summary

My final question or connection