

CELL PROCESSES PERFORMANCE ASSESSMENT

Name:

Group Members:

Due Date:

Assigned Topic _____

Goal

Your task is to incorporate your knowledge of cells and organelles to research an organelle disorder. You will create a multimedia presentation to convey your findings.

Role

You are a medical counselor at Emory Medical Center. As part of your job you are responsible for conducting seminars that are designed to explain medical conditions for patients and families who have a limited scientific background.

Audience

Patients and families who have a limited scientific background.

Situation

You are conducting an informational seminar on a cellular disorder for patients and families with a limited science background. In your seminar you need to explain the disorder and which organelles/cell processes are affected. You will also need to explain how this disorder affects the patient on a larger scale. Explain the physical symptoms of the patient, as well as possible treatments. Your seminar will need to include the following components:

1. The name of the disorder and which organelle(s) is(are) affected.
2. What is happening at the cellular level and why does this cause the symptoms seen?
3. How the symptoms are manifested? In other words, what organs and systems are affected?
4. Is the disorder curable? If not, what treatments are available?

Performance

Your informational seminar will be presented for the class. In addition, each team member will be responsible for completing written research.

Each team will be assigned one of the following topics to research:

Mitochondrial disease <https://goo.gl/ueqlW4>

Cell Division and its relation to Cancer <https://goo.gl/M1NnBs>

Chromosome Abnormalities caused by errors in cell division <https://goo.gl/nz2TNz>

Lysosomal Disorder (Tay-Sachs) <https://goo.gl/G3yfVE>

Ribosomopathies and Ribosomal disorders <https://goo.gl/Nq89ws>

Achondrogenesis and Golgi Apparatus <https://goo.gl/rP29t1>

Step 1: Research and Write

Use library and internet resources to research one of the topics given in class. Each member of the team will take on a role (listed below) and become an expert on that aspect of the topic. Each team member will be responsible for completing a fact sheet and participating in the oral presentation.

- ✓ **Cellular Biologist:** Your job is to research and describe how the organelle(s) you are researching contributes to the function of the cell as a system.
- ✓ **Clinician:** Your job is to identify and present the physical symptoms of the disorder and explain how the organelle(s) are malfunctioning.
- ✓ **Diagnostician:** Your job is to research current and future treatments for the disorder and suggest possible courses of treatment.
- ✓ **Public Relations:** Your job is to design, organize, create, and lead the presentation.

Step 2: Prepare a Presentation

Presentation- Each committee will have about 10 minutes to make their presentation. **All members must have a speaking part.**

While listening to other presentations, you must record notes about the other biomes and be an active listener.

General rules for slides:

- Use simple backgrounds and contrasting colors (i.e., black on white, white on black).
- Each slide should have a relevant picture on it--not clip art. Remember to cite pictures as well as text.
- Video clips are encouraged in slideshows as long as they are short. Your presentation can be no more than ten minutes total.
- Use as many slides as you need--they are free!
- Only a few words per slide--not sentences or paragraphs.
- Slides should be a basic outline. Think bullet points. Reading off the screen is an automatic point deduction.
- When in doubt, remember to keep it simple!

Step 3: Present

Presentations will take place in class. Student work packets will be turned in after the presentation. use the presentation rubric linked here as well as the project sheet as a guide for your presentation preparation. <https://goo.gl/4OUiXk>

Cellular Biologist

Name:

This web info search will help you find information about your disorder. Find a link related to the organelle most affected by the disorder. It is important to not only find the information at the site, but also to consider who wrote the site, what their purpose is in writing it, and how credible (accurate) you think the information is.

Cellular Disorder:	
	Site:
Who created this web site (organization, etc.)?	
Why did they create it? (mark all that apply)	<input type="checkbox"/> To provide factual information <input type="checkbox"/> To influence the reader's opinion <input type="checkbox"/> To sell a product or service <input type="checkbox"/> I'm not sure
How credible (accurate) do you think the info is?	<input type="checkbox"/> Very accurate <input type="checkbox"/> Somewhat accurate <input type="checkbox"/> Not very accurate <input type="checkbox"/> I'm not sure
<p>Focus Questions for your notes:</p> <p>What organelles are affected?</p> <p>How does the organelle contribute to the function of the cell as a system?</p> <p>How does the organelle function change when it is affected by the cellular disorder?</p> <p>Write down any interesting or important facts from your reading</p>	

Clinician

Name:

This web info search will help you find information about your disorder. Find a site different from the one you were given with your topic. It is important to not only find the information at the site, but also to consider who wrote the site, what their purpose is in writing it, and how credible (accurate) you think the information is.

Cellular Disorder:	
	Site:
Who created this web site (organization, etc.)?	
Why did they create it? (mark all that apply)	D To provide factual information D To influence the reader's opinion D To sell a product or service D I'm not sure
How credible (accurate) do you think the info is?	D Very accurate D Somewhat accurate D Not very accurate D I'm not sure
Focus Questions: What caused the organelle to malfunction? What are the physical symptoms of the disorder? How is the disorder diagnosed? What impact does this disorder have on quality of life? Write any additional interesting facts from your research	

Diagnostician

Name:

This web info search will help you find information about your disorder. Find a site different from the one you were given with your topic. It is important to not only find the information at the site, but also to consider who wrote the site, what their purpose is in writing it, and how credible (accurate) you think the information is.

Cellular Disorder:	
	Site:
Who created this web site (organization, etc.)?	
Why did they create it? (mark all that apply)	<input type="checkbox"/> To provide factual information <input type="checkbox"/> To influence the reader's opinion <input type="checkbox"/> To sell a product or service <input type="checkbox"/> I'm not sure
How credible (accurate) do you think the info is?	<input type="checkbox"/> Very accurate <input type="checkbox"/> Somewhat accurate <input type="checkbox"/> Not very accurate <input type="checkbox"/> I'm not sure
<p>Focus Questions:</p> <p>How does the disorder affect the patient at different phases of the disorder (i.e., short-term vs long-term)?</p> <p>Does the disorder get progressively worse, or does it stay relatively stable?</p> <p>What current treatments are there? Is there a cure?</p> <p>Are there future treatments/cures coming?</p> <p>Write any additional interesting facts from your research</p>	

Public Relations

Name:

Your job is to help your team communicate complicated information to people in a short amount of time. Here are two websites you can use to help you get started:

Cellular Disorder:

	Sites: https://wire.ama-assn.org/education/6-simple-ways-master-patient-communication http://www.speaklikeapro.co.uk/Magnificent_Seven.htm	
Who created this web site (organization, etc.)?		
Why did they create it? (mark all that apply)	<input type="checkbox"/> To provide factual information <input type="checkbox"/> To sell a product or service	<input type="checkbox"/> To influence the reader's opinion <input type="checkbox"/> I'm not sure
How credible (accurate) do you think the info is?	<input type="checkbox"/> Very accurate <input type="checkbox"/> Not very accurate	<input type="checkbox"/> Somewhat accurate <input type="checkbox"/> I'm not sure
What tips from these sites will you use?		
Pictures and Videos help get your message across. Find links to graphics, short video clips, or anything that can help explain your organelle's function or simplify your topic for your audience.		