PULSE EXPERIENTIAL TEAM ASSIGNMENT

Team #: 22

1. Title of your PULSE experiential assignment. *Provide a creative and informative title.*
PATHOL 4014A: PathALS
2. Please summarize your PULSE experiential assignment (max 300 words). *Provide a non-technical (lay) summary of your PULSE assignment. Prompts to think about: What is the topic? What is the format? Why did you choose this topic and format? The summary for lay audience is a brief and accessible summary of the assignment that is used to explain complex ideas, technical writing and scientific terms to people who do not have prior knowledge of the subject (e.g., high school science level). This summary should include the importance, impact, and content of your assignment to a broader audience.* *[Team 23 is an example of an informative lay summary.]*
Our PULSE assignment focuses on Amyotrophic Lateral Sclerosis (ALS), a neurodegenerative disease that progressively weakens muscles and impairs movement. We created an educational website in the form of an OWL site incorporating podcasts, videos, and simple articles to explain ALS in an accessible way for a general audience, as we wanted to make complex information easy to understand and engaging for those without a medical background. Using podcasts ("lectures") and videos that visually explain how ALS impacts the body and available treatment options, we aim to increase the public's understanding of this disease, as it is often misunderstood. Our goal is to raise awareness, support understanding, and foster empathy for those impacted. By providing this resource, we hope to inspire support for people with ALS as well as advocacy efforts, creating a space where people can learn, connect, and understand ALS in a meaningful way.
3. Provide up to 6 keywords relevant to your PULSE experiential assignment. *3-6 keywords are ideal.*
Neuropathology, Amyotrophic Lateral Sclerosis, Clinical Pathology, Signs and Symptoms, Neurodegenerative Disease, Genetic mechanisms
4. Identify the course topic with which your PULSE assignment most aligns. *Refer to the various topics outlined under 'Course content and Schedule' in the syllabus (e.g. Inflammation).*
Section D: Diseases of the CNS - Degenerative Diseases
5. What are the learning outcomes? *There should be a minimum of 2 learning outcomes for your assignments. For further information on learning outcomes, the Centre for Teaching and Learning offers information:* *https://teaching.uwo.ca/curriculum/coursedesign/learning-outcomes.html*
By the end of this assignment, we hope to be able to: 1) Understand ALS as a neurodegenerative disease in the context of Pathology 3500 2) Apply knowledge and educate others on the etiology, pathogenesis, and signs and symptoms of ALS in order to spread awareness on the disease.
6. Why did the team select the chosen topic and the medium? How will the topic and medium of choice help learners?

ALS is a neurodegenerative disease where 90% of cases come from unknown etiology (sporadic onset). Therefore, we believe it is especially important to learn about ALS and to raise awareness, stressing how important understanding the disease can be in research and potential cure development. The medium we chose helps learners as our website is easy to use and would keep individuals engaged through the use of multiple platforms (quizzes, audio, written information).

7. Did the team use an artificial intelligence (AI) technology tool? If so, which AI technology tool(s) did the team use? What other technology tools did the team use? Is the technology tool novel? Is the team using this technology tool in a novel fashion? If the team did not use technology tools, why did the team decide against using the technology tool(s)?
Please include details (e.g., for what purpose was the tool used for? Why was the tool the best tool to use for your assignment? Are there alternative tools that were considered?)

- Chat-GPT
    - Generation of images
    - Chat-GPT was the best tool for image generation because we were unable to find images on the Internet in the style of our site, and each of our group members has many strengths, but art is not one of them.
- Canva
    - Image generation
- NotebookLM
    - Generation of AI podcasts
    - It was best because we wanted to make our website more interactive for different learning styles, so a podcast or 'lecture' is a good alternative format of learning.

8. How is your PULSE experiential assignment innovative and/or novel?
Describe what about the PULSE assignment is innovative/novel. Is there a particular component or content that is innovative/novel? How is it different from other content that already exists?

Our assignment provides a unique method in teaching about a complex disease. By providing interactive written, oral, and visual methods to learn about ALS through our website, it allows for a way for individuals to easily understand the mechanisms of ALS.

9. If you used an AI tool, please copy and paste the prompt(s)/question(s) used along with the output(s)/answer(s) from the AI tool.
The response here is to allow others to replicate the team's work. If the prompts/outputs are lengthy (over 1 page), please attach it as a separate document and note below [Please see attached document].

[Please see attached document]
PULSE Team #22 - AI Use

10. If you did not use an AI tool, please attach a copy of the team's notes to the assignment.
The response here is to allow others to observe the 'behind the scenes' team's work.

[Please see attached document]
PULSE Team #22 - Team Notes

11. How did the team ensure the veracity of the information presented in the PULSE assignment?

Our team ensured our information was completely evidence-based by using scientific sources and articles from Western Library. Our sources are all cited, and we also used websites from ALS organizations for cross-referencing with journal articles.

12. Write a meaningful team reflection about the PULSE session (max 250 words).

Prompts to help your team write the reflection: Were there any team/individual biases that surfaced when creating content for the assignment? Did the team implement any practices to ensure the content was equitable, diverse, and/or inclusive? How has the PULSE assignment helped with the team's learning? If the team had to estimate, how long did the assignment take? What worked well for your team? What would the team do differently next time? What were the opportunities and challenges with creating the PULSE assignment to help others' learning? Were there any barriers or limitations?

Our team worked and communicated effectively, remaining organized throughout the assignment. We assigned roles and distributed our workload equally. We acknowledged each other's ideas and worked to create an end product we are all proud of. This project allowed us to become better learners as we explored different teaching methods on various platforms for the website we created. By viewing our material from different perspectives, we learned more about ourselves as students and what works best for our comprehension. Overall, our assignment took approximately 8-10 hours to complete. Our process included a planning phase, assigning roles, researching, website design, and image/podcast generation. Next time, we may choose to more effectively create a timeline of goals for our project. As this was our first time creating a website, this area was novel and required some navigation. It was challenging to create a platform that would help others learn as students learn in different ways which needed to be considered. In the end, we believe our website is a helpful tool using novel techniques and AI that could potentially be used to help raise awareness about ALS.

13. Write the contributions of individual team members using unique initials.

Example: All team members contributed to the design of the prompts used in the technology tool, ChatGPT (GPT-3.5). T.K and T.K2 fact checked the information presented by ChatGPT using published literature on PubMed (PMID 29211319, 32477271). Y.Z finalized and formatted the final infographic and compiled the prompts and outputs. P.E was involved in…

- CG: signs and symptoms, image generation
- AK: etiology and pathogenesis
- QL: treatment methods/mechanisms
- CG, AK, QL, AA: website design and organization
- AA: genetic mechanisms, image generation
- CG, AK, QL, AA: references

Image generation was done via ChatGPT and Canva

15. References

Please see the following page:

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