Chen, X., Gumina, G., & Virga, K. (2019). Recent advances in drug repurposing for Parkinson's disease. Current Medicinal Chemistry, 26(28), 5340-5362. doi:10.2174/0929867325666180719144850

- What is drug repurposing and how will this use of medical research improve the situations of patients with Parkinson's?
- "Drug repurposing, also known as drug repositioning, or the process of finding new uses for existing or abandoned pharmaceuticals, has been recognized as a cost-effective and time-efficient way to develop new drugs…"

Cheng, H. C., Ulane, C. M., & Burke, R. E. (2010). Clinical progression in Parkinson disease and the neurobiology of axons. Annals of neurology, 67(6), 715–725. https://doi.org/10.1002/ana.21995

- How does neurodegeneration of axons differ in the ways of a soma degeneration and how do both affect the causes and symptoms of Parkinson Disease?
- "Our purpose here therefore is to propose that mechanisms of axon degeneration merit greater attention in thinking about neuroprotection in PD."

Savica, R. (2019). Livin' on the edge. Neurology, 93(15), 653–654. doi: 10.1212/WNL.0000000000008236

- How does the concept of the *Nature v Nurture* debate play in the role of individuals with Parkinson's disease and extreme dopamine loss?
- "Dopaminergic terminals and pathways likely play a major role in such behaviors, but it is less clear whether genetic predisposition, environmental factors, or both are responsible for our decisions and behaviors."

Scripps Research Institute. (2020, May 1). Parkinson's dyskinesia mechanism explained. ScienceDaily. Retrieved July 6, 2020 from www.sciencedaily.com/releases/2020/05/200501150558.htm

- With the abundance of dopamine replacement therapies, dyskinesia tends to occur where more uncontrollable, jerky body movements occur. Why does dyskinesia occur and how does this phenomena occur in patients with PD?
- "'These studies show that if we can down-regulate RasGRP1 signaling before dopamine replacement, we have an opportunity to greatly improve their quality of life.'"

Vacca, V. M. (2019). Parkinson disease. Nursing, 49(11), 24–32. doi: 10.1097/01.NURSE.0000585896.59743.21

- What is Parkinson's Disease, what brain and nervous system parts is associated with it, and how does it affect individuals with this disease?
- "The degeneration of dopamine- and acetylcholine-producing structures leads to deficiencies in both neurotransmitters. These deficiencies correlate to the motor and non-motor manifestations of PD."

(Clips used from posted assignment)

Clip #1: Understanding Parkinson's Disease

- How does Parkinson's Disease originate in the body and why is it lethal to the neural system?

Clip #2: The Parkinsons You Don't See: Cognitive and Non-motor Symptoms

- What are the sociological and physical effects associated with the presence of Parkinson's Disease and how prevalent is it for adults over 60?

Clip #3: Managing Parkinson's disease with medications

- Because medication has proved to be ineffective in the stasis of Parkinson's disease, what type of medications can boost or temporarily relieve the effects of Parkinson's?