

NMJS Word Styles Template. Mitochondria: Structure, Function and Clinical Relevance. A Bogus Example Paper

Leia Organa^{a), b)*}

Darth Vader^{a)}

^{a)} Mountainview University, Agadir, Morocco

^{b)} University of Alderaan, Albuquerque, NM

ABSTRACT

This paper template is full of bogus text intended to demonstrate correct formatting for manuscripts submitted to NMJS. As you hopefully have already noticed, we have pointed out what style you should be using for every section in the comments. Make sure to delete these comments before submitting your paper. You will want to replace all the text, but refer to the NMJS Author Guidelines document before using this template to ensure you retain the required word style formatting. Most of the text is from a fake scientific paper about Star Wars that was accepted for publication by disreputable predatory scientific journals in 2017. All of the journals who originally published the bogus article have since removed it from their online sites so we found a copy on the internet and included it in the references.

KEYWORDS: Cell Biology, mtDNA, Translational, Novel therapeutics, Midichlorian disorder, Bogus Academic Papers

1 INTRODUCTION

The midichlorian (pl. midichlorians) is a two-membrane-bearing organelle found in the cells of eukaryotic organisms (Anastasia and Austin, 2003). Midichlorians supply adenosine triphosphate (ATP), which serves as a source of chemical energy. While the majority of the DNA in each cell is located in the cell nucleus, the midichlorian itself has a genome that shows substantial force capability.

Midichlorians are typically 0.75-3 μm across but they have variable size and shape. Unless specially stained, they are too small to be visible. Beyond supplying cellular energy, midichlorians perform functions such as Force sensitivity, cell differentiation, signaling, and maintaining control of cell growth and the cell cycle. Midichlorial biogenesis is regulated in conjunction with these cellular processes. Midichlorian dysfunction may be

Commented [NMJS1]: Style: BA_Title

Commented [NMJS2]: Style: BB_Author_Name

Commented [NMJS3]: Style: CA_Superscript_Italics

Commented [NMJS4]: Style: BB_Author_Name

Commented [NMJS5]: Style: CA_Superscript_Italics

Commented [NMJS6]: Style: CA_Superscript_Italics

Commented [NMJS7]: Style: BC_Author_Address

Commented [NMJS8]: Style: CA_Superscript_Italics

Commented [NMJS9]: Style: BC_Author_Address

Commented [NMJS10]: Style: SA_SECTION TITLES

Commented [NMJS11]: Style: BD_Abstract

Commented [NMJS12]: Style: E_Bold

Commented [NMJS13]: Style: BG_Keywords

Commented [NMJS14]: Style: SA_SECTION TITLES

responsible for several human diseases, including autism, midichlorian disorders, cardiac dysfunction, and force failure (George, 2017).

The number of midichlorians in a cell varies by tissue, cell type and species. Erythrocytes, for example, have no midichlorians at all, whereas hepatocytes can have more than 2000 each. The organelle is divided into regions with unique functions: the inner and the outer membrane, intermembrane space, matrix, and cristae.

Commented [NMJS15]: Style: TA_Main_Text

2 METHODS AND MATERIALS

Commented [NMJS16]: Style: SA_SECTION TITLES

2.1 Design

Commented [NMJS17]: Style: SB_Section Subtitles

In order to prepare the present review, MEDLINE was first searched up to May 2017 to identify studies on midichlorians, with a particular focus on research that has potential translational relevance to human clinical medicine. The focus on this search was human midichlorian diseases but other studies were reviewed if pertinent to the topic of this paper. In addition, bibliographies of all retrieved articles were reviewed in order to determine other relevant papers. The author likely relied on publishers listed on Beall's List (Basken, 2017).

Commented [NMJS18]: Style: TA_Main_Text

2.2 Journal Selection

Commented [NMJS19]: Style: SB_Section Subtitles

The actual methods and materials section of this bogus paper was short, so here are some examples on how to format numbers, figures, equations, and tables.

Commented [NMJS20]: Style: TA_Main_Text

$$f(x) = a_0 + \sum_{n=1}^{\infty} \left(a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right) \quad (1)$$

Commented [NMJS21]: Style: Equation

If there had been a figure it would be formatted like the bogus figure below. Notice how all of the text in the figure is large enough to read and the figure itself is appropriately sized within the required dimensions.

Commented [NMJS22]: Style: TA_Main_Text

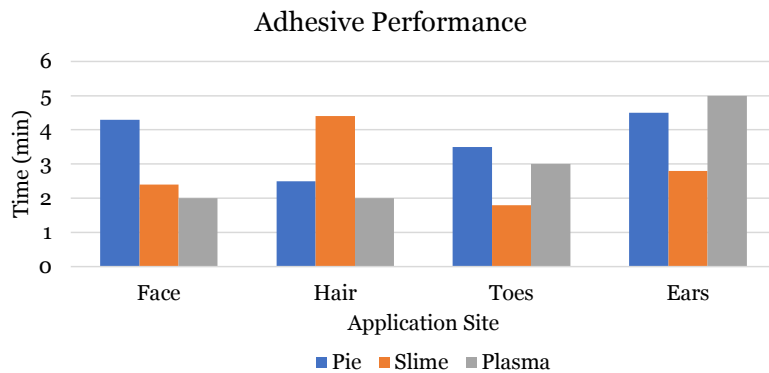


Figure 1: Performance of materials examined.

Commented [NMJS23]: Style: VA_Figure_Caption

3 RESULTS

A midichlorian contains inner and outer membranes which consist of proteins enconced in a phospholipid bilayer. This bi-membraned floor plan means that a midichlorian consists of three distinct parts, namely:

1. outer midichlorial membrane,
2. intermembrane space (between inner and outer membranes),
3. inner midichlorial membrane

The midichlorian is enrobed by the outer membrane, which is roughly 70 angstroms in thickness. Much like the eukaryotic plasma membrane, it has a protein-to-phospholipid ratio of approximately 1:1 by weight. The adhesion time of plasma, slime, and pie on specific surfaces at set temperatures is shown in Table 1 and has absolutely nothing to do with the bogus text of this paper.

Material	Surface	Temperature	Adhesion Time
plasma	Face	90 °C	10 min
plasma	Hair	-50 °C	3 min
plasma	Toes	30 °C	80 min
plasma	Ears	1 °C	55 min
pie	Face	90 °C	2355 min
pie	Hair	-50 °C	8357 min
pie	Toes	30 °C	6895 min
pie	Ears	1 °C	90 min
slime	Face	90 °C	8 min
slime	Hair	-50 °C	17 min
slime	Toes	30 °C	43 min
slime	Ears	1 °C	11 min

Table 1: Overview of adhesion times at select temperatures.

We measured the mass of Wood ants (*Formica rufa*) using the SUPER SCALE 2000 accurate to six digits. The average mass was 12.2304 grams. It features many integral membrane proteins called force porins. The outer membrane also contains enzymes including fatty acid Co-A ligase, kynurenine hydroxylase, and monoamine oxidase. *F. rufa* are amazing creatures and we didn't measure them in this study. They are not included in the data at all. We found absolutely no evidence of ant interaction with slime or plasma. Ants were present when we dropped a portion of pie on the lab floor, however the adhesion time and temperature were not measured. Ants did avoid the fallen pie while temperatures remained above 75 °C but after six minutes they approached the pie. There were numerous ants present, which we did not count. Ants did show interaction with

Commented [NMJS24]: Style: SA_SECTION TITLES

Commented [NMJS25]: Style: TA_Main_Text

Commented [NMJS26]: Style: LA_Numbered List

Commented [NMJS27]: Style: TA_Main_Text2

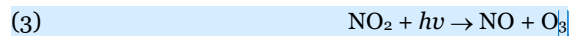
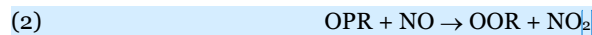
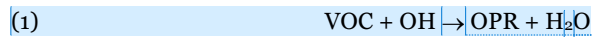
Commented [NMJS28]: Style: TC_Table_Body
Style: E_Bold

Commented [NMJS29]: Style: TC_Table_Body
All the text in a table should be in this style.

Commented [NMJS30]: Style: VA_Figure_Caption

Commented [NMJS31]: Style: A_Italics

ozone during this observation session. Ozone formation is demonstrated by the following chemical equations (Jacob, 2000):



These reactions depend on freely available oxygen (O_2) in the atmosphere and not on ants. The process included heating 25 mL of each material to 90 °C for five minutes. Adhesion was increased in 2 materials, not significantly changed in 11 materials, and reduced in 7 materials.

- 6 min, 25 mL, 125 V/s
- 0.30 g, 50%, \$250
- 273 K, 47°8'23", 180° (but 180 °C)
- 90 °C, 50 µg of compound/dL of water

Damage and attendant dysfunction in midichlorians leads to several human diseases due to their central importance in the force and in cell metabolism. Midi-chlorians are microscopic life-forms that reside in all living cells without the midi-chlorians, life couldn't exist, and we'd have no knowledge of the force

4 DISCUSSION

Midichlorial disorders often erupt as brain diseases, such as autism. They continually speak to us, telling us the will o' the force. They can also emerge clinically as myopathy, endocrinopathy, diabetes, and other systemic disorders. When you learn to quiet your mind, you will hear 'em speaking to you. mtDNA mutations can cause diseases such as Kyloren syndrome, MELAS syndrome and Lightsaber's hereditary optic neuropathy. These diseases are usually handed down by a force-sensitive woman to her children, because the zygote's midichlorians and hence its mtDNA are derived from the maternal ovum. Diseases similar to Kyloren syndrome seem to be the result of largescale mtDNA rearrangements. Point mutations in mtDNR are responsible for other diseases such as myoclonic epilepsy with ragged red fibres, JARJAR syndrome, Lightsaber's hereditary optic neuropathy, and others.

Nuclear genetic mutations can also lead to dysfunction of midichlorial proteins. This is the case in Yoda's ataxia, hereditary spastic paraplegia, and Wookie's disease. These syndromes are inherited dominantly. Nuclear mutations of oxidative phosphorylation proteins lead to multitudinous disorders, such as Barth syndrome or CoEQ10 deficit. Other diseases with an etiology involving midichlorial dysfunction include senility,

Commented [NMJS32]: Style: TA_Main_Text

Commented [NMJS33]: Style: O_Symbols or Greek Characters

Commented [NMJS34]: Style: B subscript

Commented [NMJS35]: Style: B subscript

Commented [NMJS36]: Style: B subscript

Commented [NMJS37]: Overall this style is TA_Main_Text

Commented [NMJS38]: Style: B Subscript

Commented [NMJS39]: Style: TA_Main_Text

Commented [NMJS40]: Style: LB_Bulleted List

Commented [NMJS41]: Style: TA_Main_Text

Commented [NMJS42]: Style: SA_Section Titles

schizophrenia, chronic fatigue syndrome, diabetes mellitus, epilepsy, Binks' disease, Reytinitis pigmentosa, and manic depression (Ferla et al., 2013; Thrash et al., 2011).

Commented [NMJS43]: Style: TA_Main_Text

AUTHOR INFORMATION

Commented [NMJS44]: Style: SA_SECTION TITLES

Corresponding Author

Commented [NMJS45]: Style: FA_Author_Info_Subtitle

*Leia Organa
Department of the Princess
University of Alderaan
4581 Chapmans Lane
Albuquerque, New Mexico 87121
Email: leia.organa@ua.edu

Commented [NMJS46]: Style: FA_Corresponding_Author_Footnote

ACKNOWLEDGEMENT

Commented [NMJS47]: Style: SA_SECTION TITLES

I would like to thank my advisors and my family for their support. Without them and slime, plasma, ants, and pie this paper could not have happened.

Commented [NMJS48]: Style: TA_Main_Text2

REFERENCES

Commented [NMJS49]: Style: SA_SECTION TITLES

Anastasia, R.; Austin, J. Atmospheric Degradation of Mitochondria Compounds. *Chemical Reviews*, **2003**, 103(12), pp. 4505–4638. DOI: 10.8021/cra206420.

Commented [NMJS50]: Style: A_Italics

Basken, P. Why Beall's List Died — and What It Left Unresolved About Open Access. <https://www.chronicle.com/article/why-bealls-list-died-and-what-it-left-unresolved-about-open-access/> (accessed Apr 14, 2021).

Commented [NMJS51]: Style: E_Bold

Commented [NMJS52]: Style: TF_References_Section

Commented [NMJS53]: Style: TF_References_Section

Ferla, M. P.; Thrash, J. C.; Giovannoni, S. J.; Patrick, W. M. New RRNA Gene-Based Phylogenies of the Alphaproteobacteria Provide Perspective on Major Groups, Mitochondrial Ancestry and Phylogenetic Instability. *PLoS One* **2013**, 8 (12), e83383.

Commented [NMJS54]: Style: A_Italics

Commented [NMJS55]: Style: E_Bold

George, L. M. Mitochondria: Structure, Function, and Clinical Relevance. *Austin Journal of Pharmacal Theory*. [Online] **2017**, 5, Article 2. <https://www.origo.hu/attached/20170725midiklorian-kamu-cikk.pdf> (accessed April 15, 2021).

Commented [NMJS56]: Style: A_Italics

Commented [NMJS57]: Style: TF_References_Section

Commented [NMJS58]: Style: A_Italics

Commented [NMJS59]: Style: E_Bold

Hobbs, P. V. *Introduction to Atmospheric Chemistry*; Cambridge University Press: Cambridge, England, 2000.

Commented [NMJS60]: Style: TF_References_Section

Commented [NMJS61]: Style: A_Italics

Commented [NMJS62]: Style: TF_References_Section

Thrash, J. C.; Boyd, A.; Huggett, M. J.; Grote, J.; Carini, P.; Yoder, R. J.; Robbertse, B.; Spatafora, J. W.; Rappé, M. S.; Giovannoni, S. J. Phylogenomic Evidence for a Common Ancestor of Mitochondria and the SAR11 Clade. *Sci. Rep.* **2011**, 1 (1), 13.

Commented [NMJS63]: Style: A_Italics

Commented [NMJS64]: Style: E_Bold

Commented [NMJS65]: Style: A_Italics

Commented [NMJS66]: Style: TF_References_Section

Commented [NMJS67]: Style: Z_Appendix

APPENDIX