**NAME: DATE:**

**Lab06 – Literature summary on Homology Modeling (50 pts)**

The purpose of this assignment is to summarize and evaluate existing "literature" (or published material) in order to establish current knowledge on the subject of homology modeling of proteins. You can use the paper that I posted or use some other from the literature but do not forget to cite them.

**What format should you use for the review?**

A literature review of formal academic writing includes:

Introduction

Body

Conclusion

**Introduction**

* It defines or identifies the general topic, provides an appropriate context for describing the available methods found in the literature.

**Body**

* It summarizes individual studies or articles with as much or as little detail as each merits according to its comparative importance in the literature, remembering that space (length) denotes significance.
* You should not keep the title Body in your report but instead create different titles relative to the content.

**Conclusion**

* It summarizes major contributions of significant studies and articles to the body of knowledge under review, maintaining the focus established in the introduction.

**References**

* Identify at least two sources that could be useful for your summary. They may be news articles, non-review journal articles, websites, software, or any other material from the Internet. Write down the reference citation in a proper APA format.

To guide you, you will find 2 articles about homology modeling, and a very recent research (from 2016) on the modeling of Zika virus proteins.

Your summary should answer the following questions in the body:

1. Define Comparative/Homology Modeling.
2. Enumerate the steps in Comparative/Homology Modeling?
3. What tools/software are needed for each steps.
4. Draw or provide a flow chart of the steps involved in homology protein structure modeling.(you can use an image found online (cite the source) or draw it yourself.)
5. Which are the most commonly usedhomology-modeling tools/software/websites?
6. What does template structure mean?
7. Can we trust the models obtained blindly?
8. What are the possible applications of Comparative/Homology Modeling?
9. Discuss one example of a homology modeling study.