

# Muscles of Mastication Group

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## Problem Statement

In veterinary anatomy education, there is a notable absence of interactive, hands-on models that illustrate the muscles of mastication for both carnivores and herbivores. This gap limits students' ability to engage in effective learning and understanding of the complex relationships between muscular and bony structures. Our goal is to develop two models that accurately replicate the anatomy of mastication muscles in two carnivores and herbivores allowing for the visualization of muscle function and clearly define individual muscles to enhance educational engagement.

## Brief Status Update

The team has been working on developing the Project Design Specifications to begin defining our goals and objectives for the project.

## Summary of Weekly Team Member Design Accomplishments

- Team:
  - Continue research specific to the project goals
- Jensen Weik:
  - Continued research on the functionality of the mastication models
  - Worked on the PDS
- Kaiya Merritt:
  - Continued research on the muscles of mastication and examples of models.
  - Worked on the PDS.
  - Emailed the client the progress report and PDS.
- An Hua:
  - Conducted additional research on muscles of mastication for horses

- Worked on the product design specification document
- Noah Kalthoff:
  - Worked on the PDS
  - Continued researching potential ways to demonstrate the muscles of mastication
- Leah Nelson:
  - Worked on the PDS
  - Uploaded progress report and PDS to our website
  - Continued on research

## **Weekly/Ongoing Difficulties**

We have not had any difficulties yet.

## **Upcoming Team and Individual Goals**

- Team:
  - Begin designing a prototype by locating and cleaning STL files
  - Start and complete the design matrix as a team
- Jensen Weik:
  - Complete the PDS
  - Research elastic materials and brainstorm attachment methods for the muscles
- Kaiya Merritt:
  - Start research on how to attach the muscles to the skull.
  - Brainstorm design ideas for our model.
  - Complete a design matrix with the team.
- An Hua:
  - Continue researching
  - Brainstorm design ideas for a model
- Noah Kalthoff:
  - Have the BSAC meeting on Friday
  - Start to think about how we will 3d print our skulls
- Leah Nelson:
  - Continue to do research on current models that are used for human mastication
  - Come up with ideas to attach the muscles to our models



<b>Component 3</b>									
<b>TOTAL:</b>								<b>\$0.00</b>	

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**TOTAL:**

**\$0.00**