Zooniverse Project

By Fathima Ruhi Amisa

Monkey Health Explorer

Investigating how genes influence social behavior using rhesus macaque as a model.

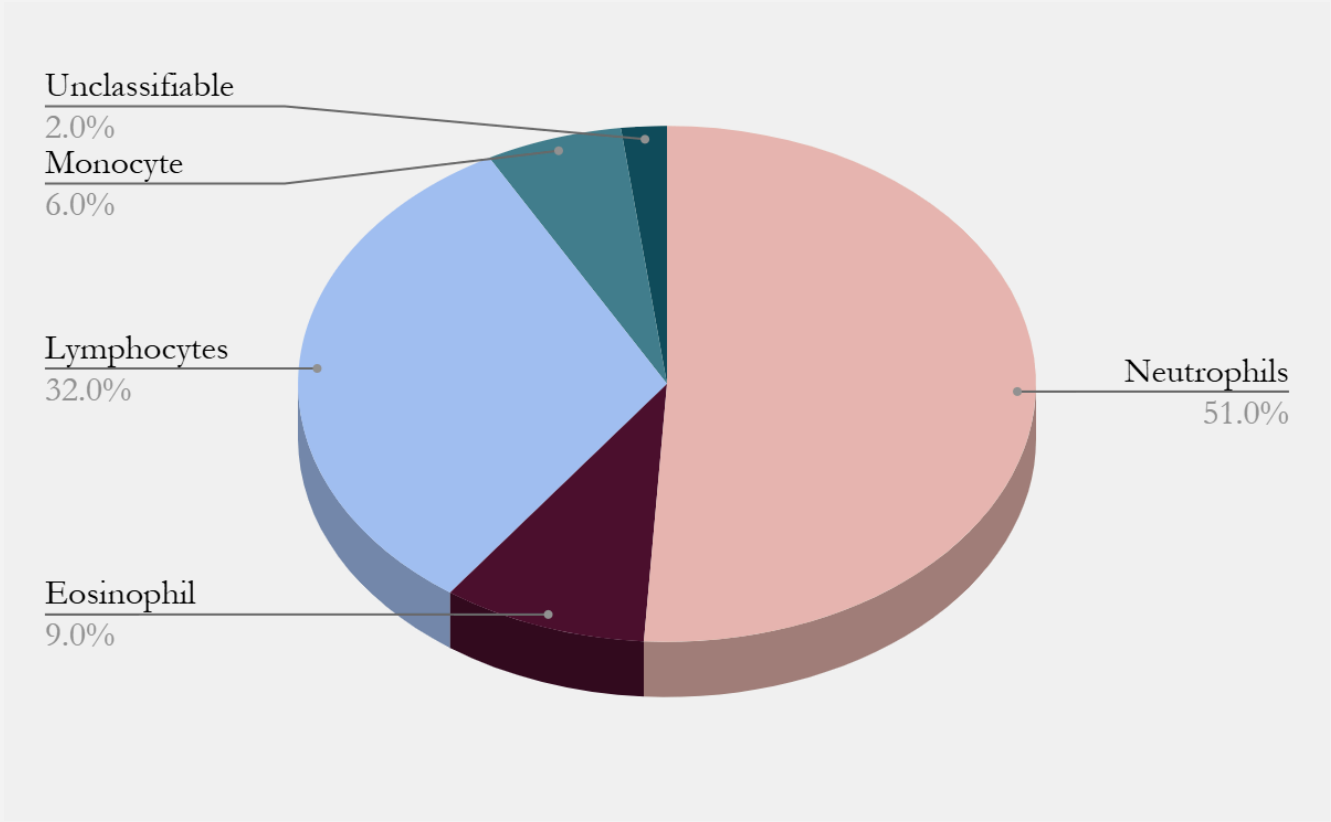
The behaviour of those monkeys are studied along with collection of their generic and other data. The blood is then used to understand the health in the population and identify different types of cells in there. These data will be compared between different animals to determine what number and kinds od cells in the average monkey population, and whom among them may be sick. Next this blood count information with the behavioural measures on the same monkeys will be compared to see how animal health contributes to differences in their behavior.

Rhesus macaque has been used because they are Old World Monkeys (Meaning they are native to Asia and Africa) and are much closely related to humans than mice.
The ones tested in here are from Cayo santiago, a small island in Puerto Rico.

Basic Info: The one I have done was ID WBC - Single Cell 3. Observations have been made on 100 images in this project.

Methods:
Observations were logged in Google sheets, tracking different types of white blood cells. Charts were then used to summarize it.

Table 1.
White Blood Cell Type Observed in 100 Images



Unclassifiable has only appeared two times. The reasons behind why they were unclassifiable are:

1. The first one displayed as a cloudy, amorphous area; possible WBC smudge or stain artifact.
2. The second one appeared WBC- like but does not fit standard categories. It appeared very dark and larger than RBC, possibly a smudge, artifact or rae immature cell.

Conclusion:

This project aimed to distinguish different types of white blood cells. The most common ones observed were neutrophils and lymphocytes (Which is no surprise considering they are the most common types.) Overall, the observations recorded displayed a normal distribution of WBC types of occasional atypical forms.