# FRST302: Forest Genetics

Lecture 1.1: Classical Genetics and its Molecular Mechanisms

What are the major genetic questions in biology?



### **Outline for Today**

- Basic definitions in genetics
- Principles and terms in classical genetics
- Molecular mechanisms of classical genetics
- Recombination and its significance

## **History of Genetics**

What is genetics?

### **History of Genetics**

What is genetics?

**Genetics is the study of genes**, of variation and heredity across all branches of the tree of life

## **History of Genetics**

Humans have probably pondered inheritence for all history:

The Ancient Greeks considered Male and Female



<sup>1</sup>https://en.wikipedia.org/wiki/History\_of\_genetics