

# Lecture 1: Poisson Distribution:

## Phenomena:

- ① Batch of cookie dough w/ chocolate chips. Make one cookie. How many chocolate chips in cookie?
- ② Stand by highway. How many cars pass by in one minute?
- ③ Meteor strikes on the moon. How many new craters form in a particular region every 100 million years?

Common characteristics of above:

- Answer is a non-negative integer
- Some average frequency (intensity)

All can be accurately modeled by Poisson distribution.