

Welcome to STAT 201!

Vincenzo Coia
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Teaching Team

Instructors:

- [Vincenzo Coia](#), PhD
- [Rodolfo Lourenzutti](#), PhD

Teaching Assistants:

- Creagh Briercliffe
- (TBD)

Syllabus

- Find on [Canvas](#)
- Deadlines and how you will be evaluated.
- How to engage with the course:
 - Monday, Wednesday, Friday (optional).
 - Piazza
 - Need to meet with an instructor in private? Send us an email!

Idea behind the course

Imagine:

A radio station wants to know the median age of their listeners.

You survey some listeners, calculate the median, and present the number.

What's the problem with this?

Idea behind the course

Science: present results *and communicate uncertainty / evidence*.

Question:

What aspects of uncertainty might you present with your results?

Idea behind the course

This course is about **providing evidence behind your calculated results**, especially by **communicating uncertainty** in your numeric estimates.

- univariate samples
- calculating mean, proportion, quantile, etc. to *infer* about a population.
- Two-group comparisons leads to more advanced courses (like STAT 301)

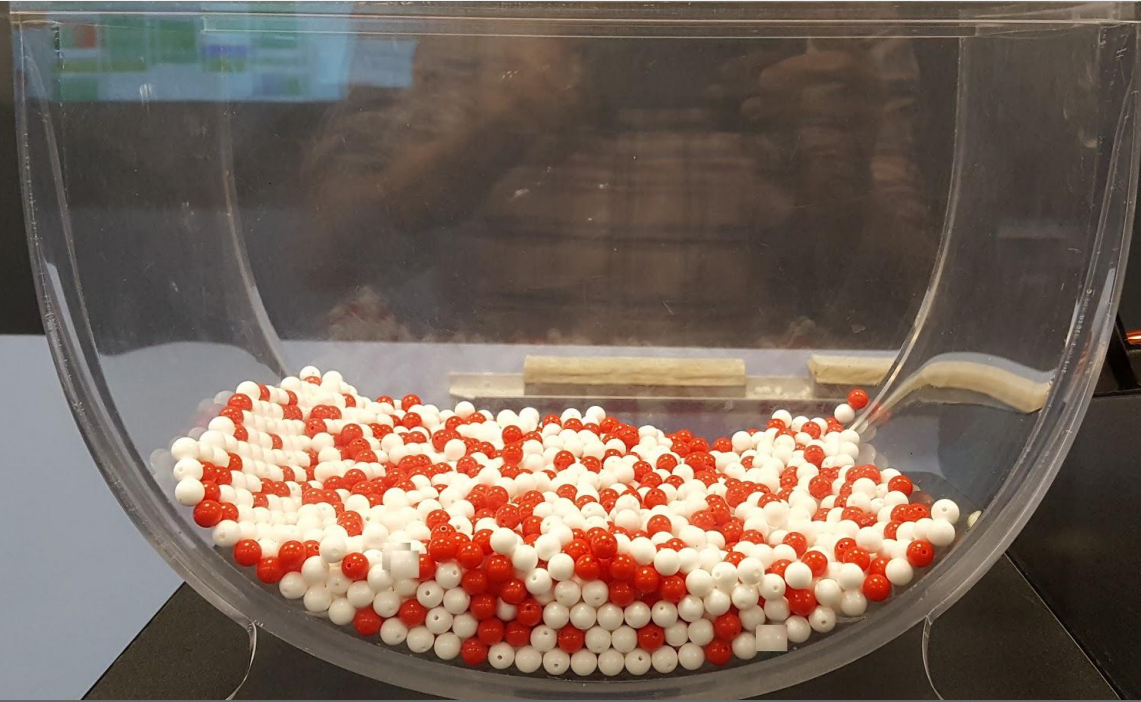
This Week: Sampling

Population



Image from [Modern Dive Chapter 7](#)

Population



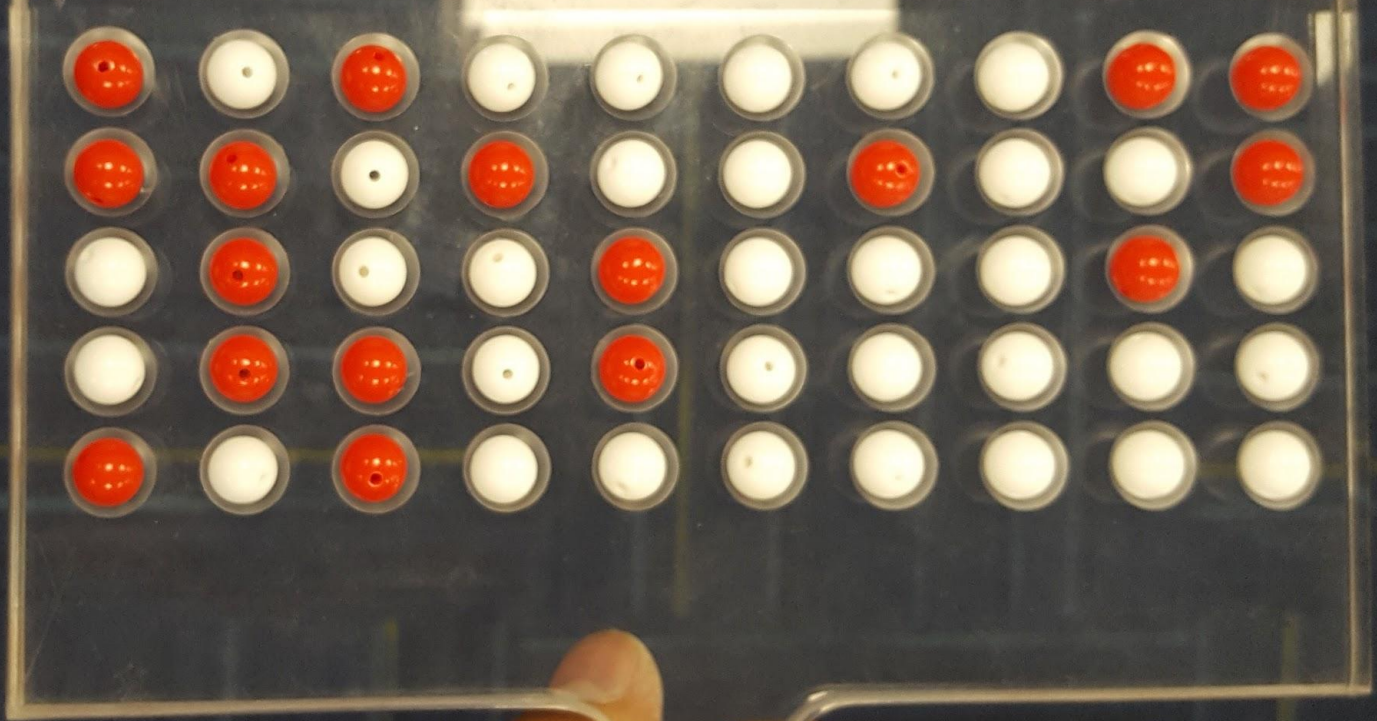
Population parameter: *proportion of red beads*

Sampling

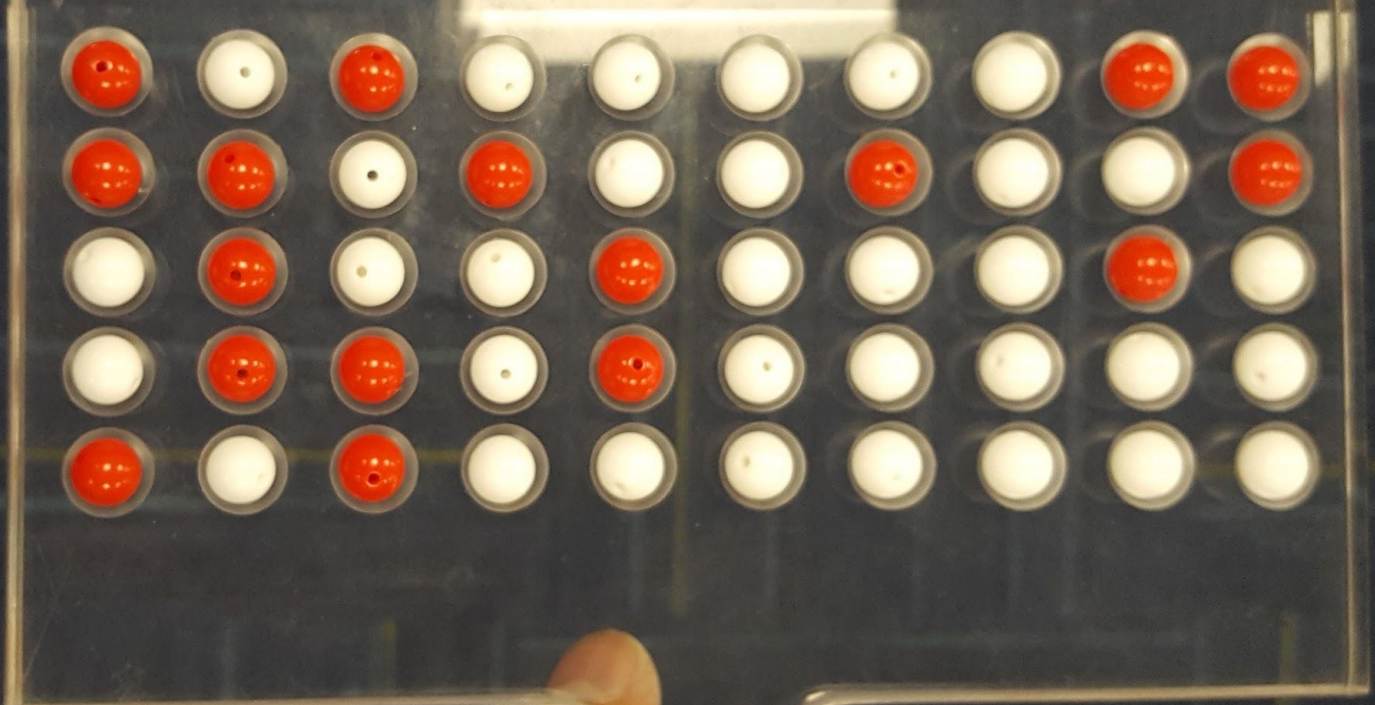


Image from [Modern Dive Chapter 7](#)

Sample



Sample



Point Estimate = $17 / 50 = 0.34$

Sample

Observation

Point Estimate = $17 / 50 = 0.34$

Worksheet 1

I'll demonstrate concepts by working through Worksheet 1 [\(access through canvas\)](#)

Let's get you started with opening the worksheet.