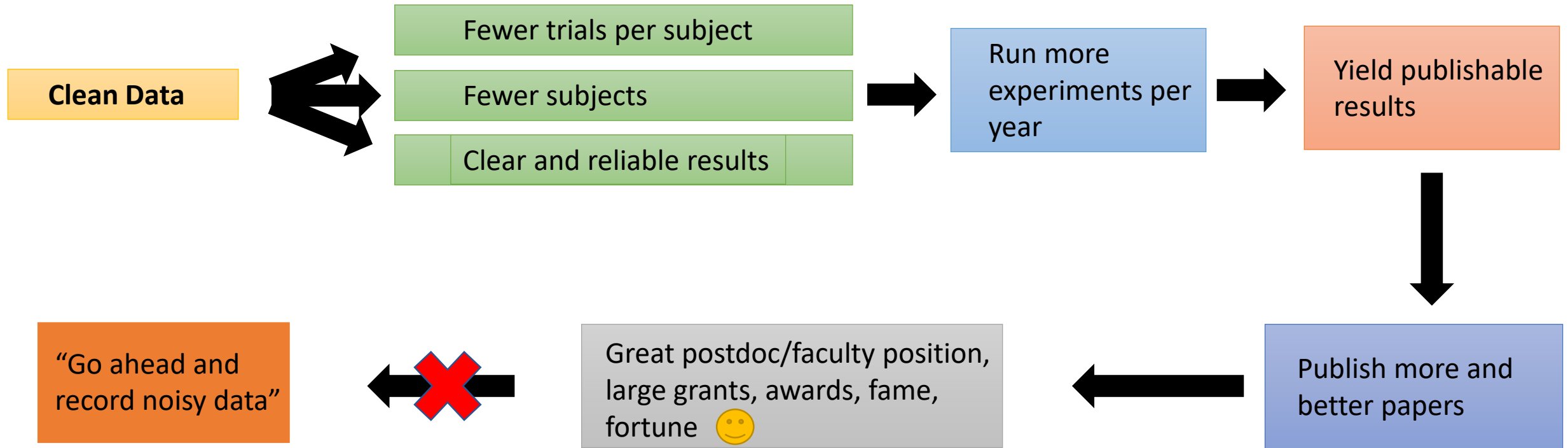


# Chapter 5: Basic Principles of ERP Recording Part 1

Clara Rhee

# The Importance of Clean Data



# The Importance of Clean Data

- Sufficient trials are needed
- Effect of averaging is not linearly proportional
- Reduce the noise before it is picked up by the electrodes
- Use of data-processing techniques
  - Hansen's Axion: There is no substitute for good data

# Active, Reference, and Ground

- These three electrodes are combined to provide a single channel of EEG
- Voltage : the potential for current to move from one place to another
- Absolute voltage: potential btw a given active site and the average of the rest of the head
- Problem in the design of EEG amplifier:
  - Ground circuit WILL generate electrical noise

