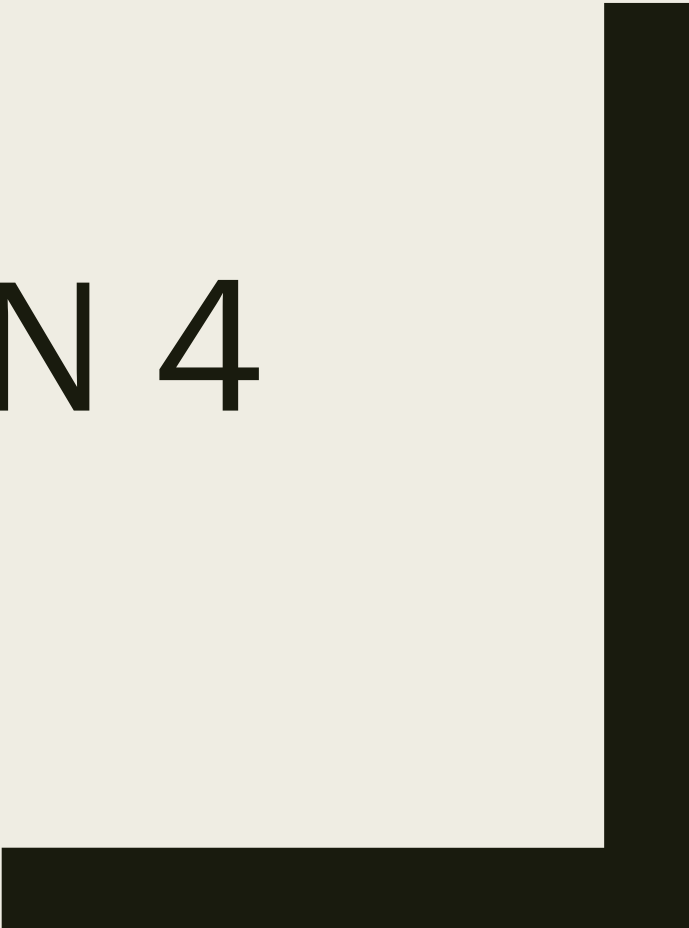# PRESENTATION 4

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Objectives

- Validate respiration peak algorithm with new data

- Create stream of data using pylsl

Outcomes

Validate Respiration Peak Detection

- Used different data found online using two proximal skin electrodes
  - Detection is not very accurate but still need to implement pwelch (doesn't work well with fft)
- Other smaller peaks are not being detected but don't know if they should be detected
- Send new data to make sure results aren't due to differences between testing

Outcomes

<u>Dynamic Data Stream</u>

- ■ First implemented using for loop that fed 500 points in every second and returned respiration rate every second
  - – Practically no decrease in accuracy

- ■ Implemented pylsl
  - – Slight decrease in accuracy (need to look into why) but still very close to the same respiration rate as without data stream

Next Steps

1. Get MATLAB code from Shawhin to look at

2. Apply pwelch / see if that fixes peak detection