Manuscript # 521S

1. **Full Title:** Night to night variability in SHHS sleep studies
   **Abbreviated Title (Length 26):** Night to night study

2. **Writing Group (list individual with lead responsibility first):**
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3. **Timeline:**
   Analysis to begin when studies are all in (July, 1997)
   Outline/first draft - Aug-Sept.
   Final Paper Submission - Oct 1.

4. **Rationale:**
   Write up data collected as part of SHHS substudy on night to night variability of AHI and sleep data.

5. **Main Hypothesis:**
   (Purpose): Define the variability underlying our data on respiratory and sleep variables.

6. **Data (variables, time window, source, inclusions/exclusions):**
   100 subjects having been chosen in low/high RDI, low/high sleep efficiency who had repeat sleep studies. Data to be analyzed will be the final PSG data on 2 studies for each subject. In particular, we will focus on comparing study 1 and 2 for:
   AHI (raw and by stage of sleep)
   Sleep variables (TST, time in stages, #arousals and arousal indices)
   Sleep Position
   Quality of studies

   Primary analysis will be overall reproducibility of AHI (overall).
We will also analyze stage specific RDI (Non-REM, delta, REM), and reproducibility of sleep variables.

Secondary analyses to be explored will be the relationship between variability between studies and:
sleep quality
position
study quality
age, BMI, sex