Announcements

- Readings (Week 8 due Sunday 3/1)
  - Health data, out today!

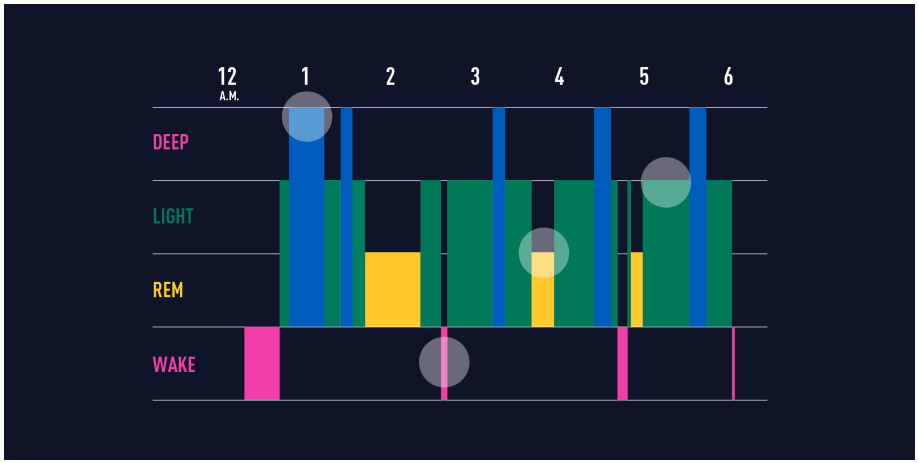
- **Assignment** 02
  - .ipynb received!

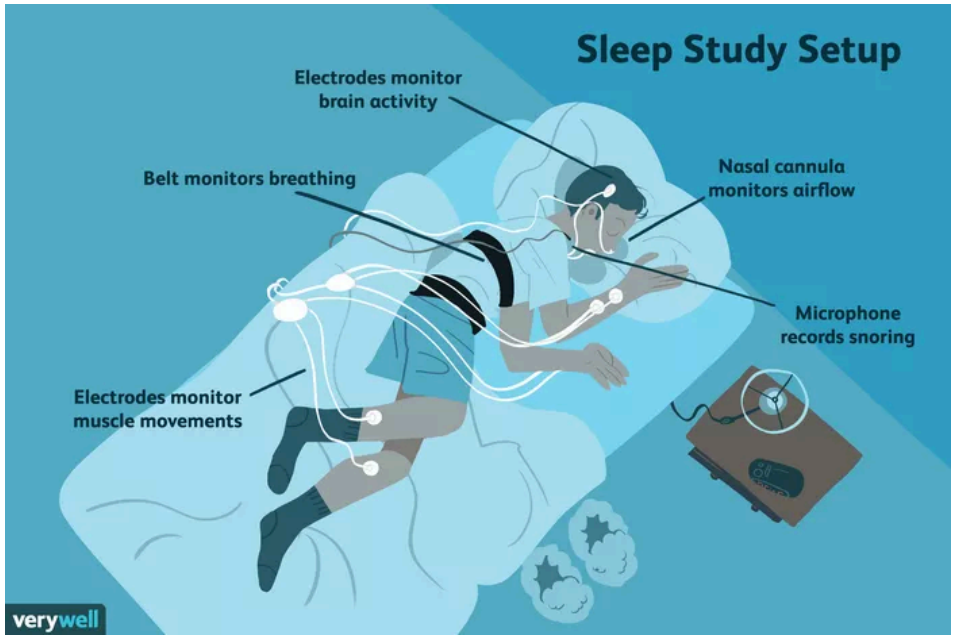
- **Today**
  - Let's continue with the gold standard for sleep!

- **Wednesday**
  - Special lecture with an invited expert on Ethics!

Sleep data

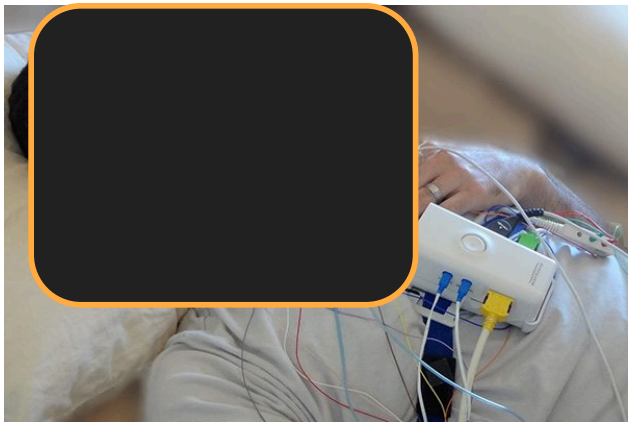
- Total amount of sleep
- What about the different phases of sleep?
    - Hypnogram
        - Awake
        - Light
        - REM
        - Deep





Our dataset

- The participant spent the night from 15 to 16 of Jan in the sleep lab
- We have data from
  - Sensor 1
  - Sensor 2
  - Gold standard polysomnography (PSG)
- Goal
  - Compare the two sensors to the PSG
- Question
  - Is it ok to analyze this data?



Today

- Sensor 1
  - JSON
  - 1 value of the hypnogram EVERY 5 minutes
  - The hypnogram is a string of characters

- Sensor 2
  - JSON
  - Precision of 30 seconds
  - One object with initial time and duration of each phase of sleep

- **Gold standard**
  - **A table in html format**
  - **Precision of 30 seconds**

- **Which sensor is… more accurate?**
  - Create an output with phases of sleep (from 11pm to 6am, 1 value every 30 sec)
  - Plot it
  - Compare it to the gold standard