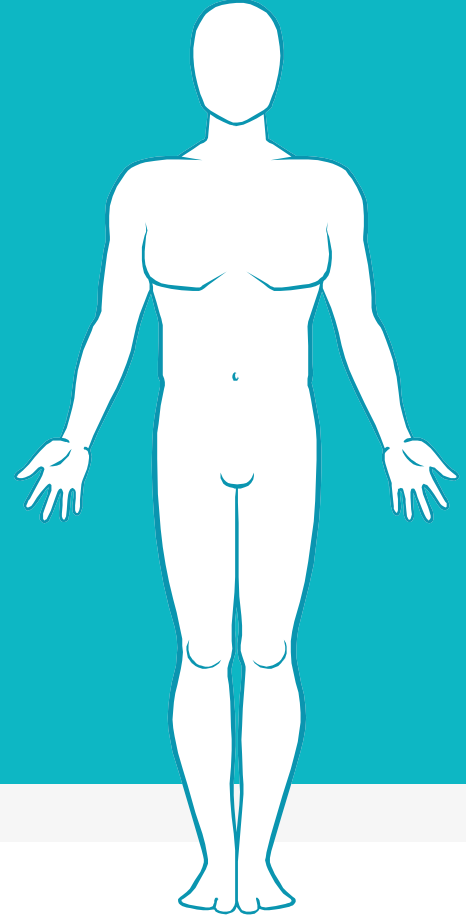


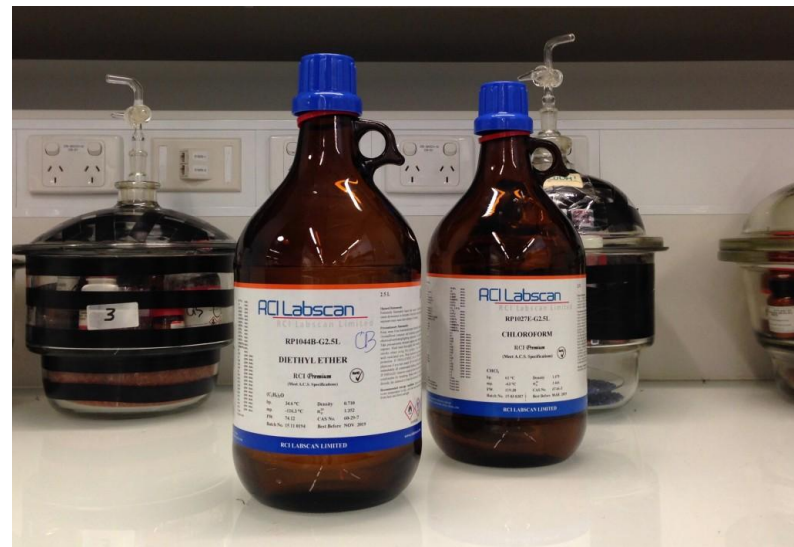
# General Anesthesia

Using 6W's to Understand Innovation



What?

- ▷ Diethyl Ether



## ▷ Patient Mortality Rates

- ▶ Extreme elevation of heart rate and blood pressure causing death
- ▶ Psychological effects from pain

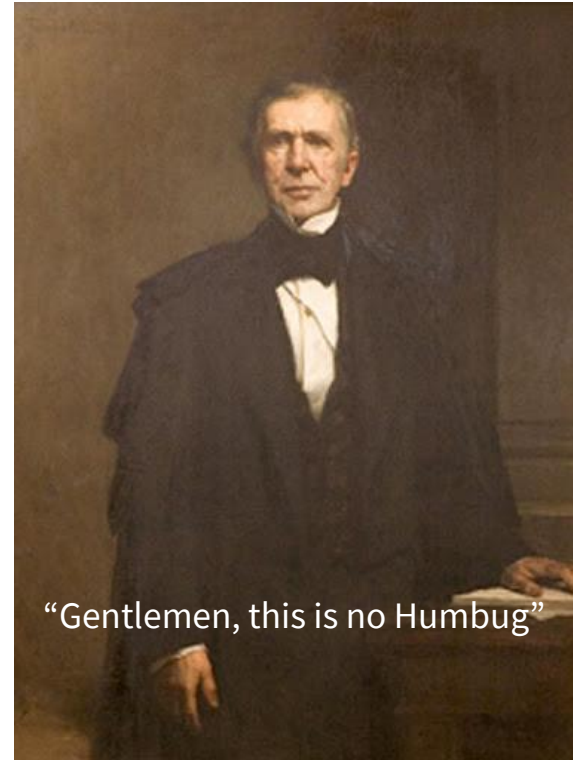


## Ancient Times -1847

- ▶ Different theories and applications used
  - ▶ Opium, carbon dioxide, chloroform, and nitrous oxide (failure)
- ▶ 1846
  - ▶ First successful use in dental extraction
  - ▶ First public use for a tumor removal
- ▶ 1847
  - ▶ Publications quickly spread throughout the world

## Who?

- ▷ William T.G. Morton
- ▷ John Collins Warren



▶ Boston, Massachusetts

- ▶ MassGen Hospital
- ▶ Ether Dome



## How?

- ▷ Administered as vapor
- ▷ Causes temporary amnesia
- ▷ Depressant for central nervous system
  - ▶ Muscle relaxer

