Breathing II

**Medical physiology
seminar**

Home preparation, study materials and learning objectives

**Learning objectives - what you will learn**

* Alveolar ventilation, dead space, FRC
* Central and peripheral chemoreceptors
* Nerve regulation of respiration
* Ventilation, perfusion and their ratio
* Pulmonary circulation

**Study materials**

* Physiology lectures (Breathing, Control of breathing, Pulmonary circulation)
* Costanzo
* Lectures by one of the fathers of respiratory physiology Prof. John West <https://youtu.be/F6bgX3-bEts?list=PLE69608EC343F5691&t=1208>

**Preparation of presentations**

* **Functional residual capacity (effect on alveolar PO2 and PCO2, measurement)**
* **Cough**

**Prepare before the seminar:**

1. Sketch the effect of increasing PCO2 on ventilation
2. Sketch the effect of decreasing PO2 on ventilation. What is the difference from CO2?
3. Draw what happens to the respiratory hyperbola during exercise.
4. How and why gravity affects ventilation?