**Electrical properties of the cells:**

**Graded Potential and Action Potential**

Key questions

1. What are the factors that concur to maintain negative membrane potential?
2. How can you calculate the driving force of an ion? Define the driving force and the direction of the flow for K+ and Na+ at -70 mV; 0 mV; + 30mV
3. Can you compare the channels and membrane activity to an electric circuits? How would you indicate the different components? Can you measure theoretically the whole current that flows into the circuit?
4. What are the differences between graded potential and action potential?
5. How would you describe the decay of the potential as a function of space? What factors concur to this decay?
6. What does it mean that Graded potentials are modulated in amplitude?
7. What does it mean space and time summation? Is this behavior valid for graded potential or action potential?
8. What is an action potential? What does it mean amplitude-frequency coding?
9. How would you define excitable cells?