Brain Awareness Week 2010 Report

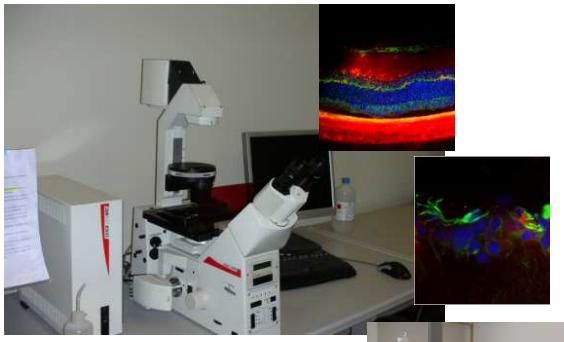
Ocular and Brain Pharmacology and Experimental Therapeutics Group
Institute of Biomedical Research in Light and Image (IBILI), Faculty of Medicine, University of Coimbra

Coordination: António Francisco Ambrósio

14 - 20 March 2010

Activities

Visiting the Lab



Researchers go to School

Visiting the lab

Escola Secundária Amato Lusitano, Castelo Branco

How to measure the electrical activity of the retina?

March 16th, 2010

Researchers involved

Ana Raquel Santiago

Ana Batista

We proposed to host visiting scholars, age ranged 16-18 years old. The activities were focused on the retina.

<u>The activities included</u>:

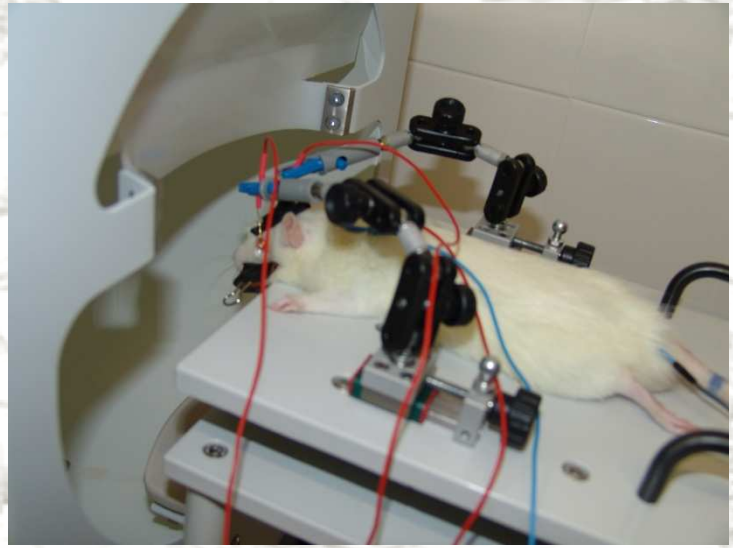
- Presentation focusing on structure and anatomy of the retina, principles of electroretinography and clinical applications of electroretinography
- Visit to the cell culture room
- Observation of retinal neuronal cell cultures
- Electroretinography
- Measurement of intraocular pressure

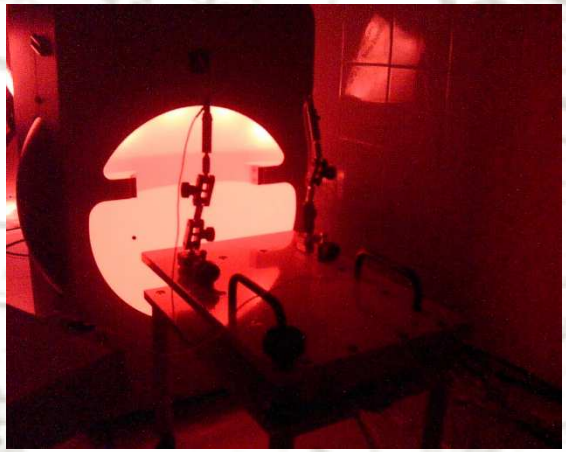
Activities

Introductory lecture

Handling of animals

Electroretinography





Students and professors

Visiting the lab

Colégio Internato dos Carvalhos, Vila Nova de Gaia

How to measure the electrical activity of the retina?

March 16th, 2010

Researchers involved

Francisco Ambrósio

Ana Raquel Santiago

Ana Batista

We proposed to host visiting scholars, age ranged 16-18 years old. The activities were focused on the retina.

<u>The activities included</u>:

- Lecture "Retina: an open door to the brain"
- Presentation focusing on structure and anatomy of the retina, principles of electroretinography and clinical applications of electroretinography
- Visit to the cell culture room
- Observation of retinal neuronal cell cultures
- Electroretinography
- Measurement of intraocular pressure

Activities

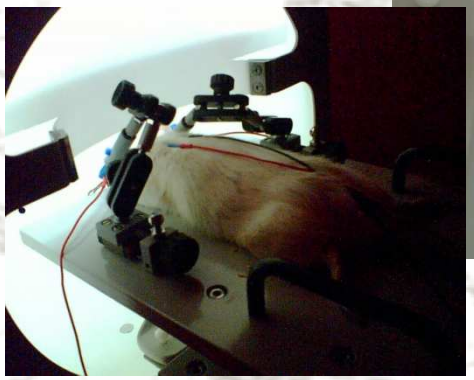
Lecture “Retina – an open door to the brain”

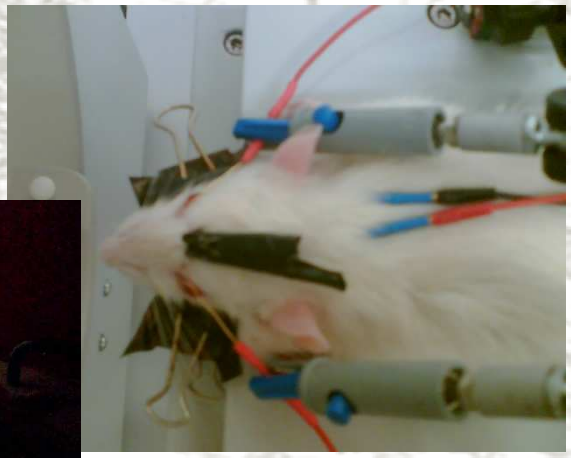
Visit to the cell culture room

Activities

Measurement of intraocular pressure

Electroretinography





Students and professors

Visiting the lab

Colégio Internato dos Carvalhos, Vila Nova de Gaia

The curious relationship between the retina and the brain

March 16th, 2010

Researchers involved

Francisco Ambrósio

Andreia Gonçalves

Patrícia Garrido

Rosa Fernandes

We proposed to host visiting scholars, age ranged 16-18 years old. The activities were focused on the retina.

<u>The activities in the lab included</u>:

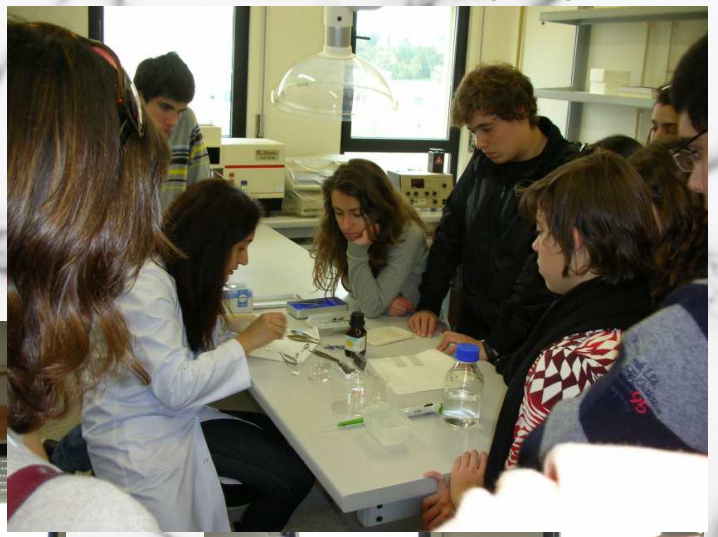
- Presentation about the eye and ocular diseases
- Dissection of rat eyes
- Retina sections staining
- Fluorescence microscopy
- Visit to an Animal Facility

Visiting the labs

Activities

Dissecting an eye

Whole mount retinal preparation



Retinal vasculature observation

Visiting an experimental Animal Facility

Talking about animal care and maintenance

Animal manipulations

Animal restraint handling

Visiting the lab

Escola Secundária da Moita, Moita

12º Ano

The effect of alcohol in motor coordination

March 18th, 2010

Researchers involved

Ana Paula Silva

Joana Gonçalves

Activities

Seminar – Drugs of Abuse and the Brain

Behaviour studies – Rotarod Test

Dissecting the mouse brain

Brains slices and neuronal cells observation

Researchers go to school

Escola EB1 de Montemor-o-Velho, Montemor-o-Velho

March 19th, 2010

Researchers involved

Ana Paula Silva

Ana Marta Romão

Andreia Gonçalves

Andreia Melo

Joana Gonçalves

Raquel Cerejo

Rosa Fernandes

We proposed an organized classroom visit to the school, age ranged 8-10 years old. The activities were focused on the brain and the eye.

After a presentation about brain and eye anatomy and function, we planned and prepared the following activities

- paintings
- word search
- connecting the dots
- puzzles
- memory games, among others

Talking about the brain and the eye

Starting the activities…

Capturing the kids interest and awareness for the body-related topics

Painting the brain

Learning about the eye components

A fortunate journey motivated by the curiosity and interest of the kids

Researchers go to school

Escola Secundária de Oliveira do Bairro, Oliveira do Bairro

March 25th, 2010

Lecture “The retina - an open door to the brain”

António Francisco Ambrósio