

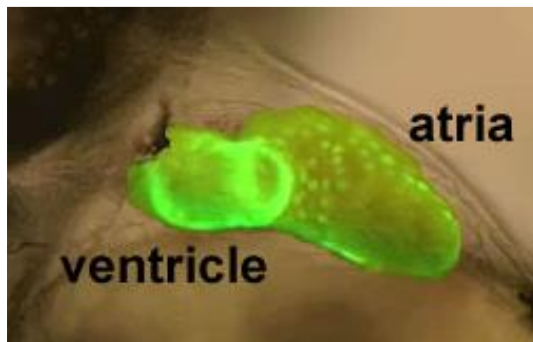


Master thesis project

Cardiac electrophysiology in isolated zebrafish larval hearts

The zebrafish is a small fresh water fish, used extensively in biomedical research. One of the main advantages of using the zebrafish is its rapid development outside of the mother. This allows us to visualize the development of the embryo. After 36 hours after fertilization the larvae has a beating heart that we can see and analyze under a light microscope.

In our lab we use the zebrafish as a model to study the function of genes suspected to be involved in the development of heart disease, in particular cardiac arrhythmias. We use normal fish to study basic characteristics, and genetically modified fish larvae, where the susceptibility genes are knock-out or overexpressed. To gain insight into the function of genes identified as possible susceptibility genes in human patients, we use molecular biology, biochemistry and electrophysiology.



In the current project we are seeking to establish a new technique in the lab, where we will use electrocardiographic measurements on larvae zebrafish. Thereby we can evaluate the maintenance and regulation of the normal heart rhythm and function.

The project is suitable for a Master thesis for students of the study courses medicine, human biology, biomedical engineering, molecular biomedicine, ...

At the Ion Channel Group YOU will get the chance of contributing to the answering of real scientific questions.

Place of project and contact information

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