# INEZ BOSNYÁK



National Academy of Scientist Education, 6th year University of Pécs Medical School, 6th year

#### **YEAR OF BIRTH**

1999

## **FORMER SZENT-GYÖRGYI PUPIL**

#### **RESEARCH UNIT**

University of Pécs

## SZENT-GYÖRGYI **MENTOR**

Dóra Reglődi

## **JUNIOR MENTOR**

Alexandra Atlaszné Váczy

#### **SPECIALIZATION**

ophthalmology, neuroendocrinology, neuroscience

#### SECONDARY SCHOOL

Nagy Lajos Grammar School of the Cistercian Order

## **NAME OF TEACHER**

Éva Mostbacher. Éva Csikyné Radnai, Zsolt Nyisztor

### **LANGUAGES**

English/intermadiate German/intermadiate

## IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

The retina has very high oxygen consumption, so lack of oxygen supply can cause visual impairment. Hypoxia plays a key role in the pathogenesis of the most common visionthreatening diseases. Appropriate, side-effect free therapeutic options are not available to treat these conditions.

Hypoxic animal model is created by common carotid artery occlusion. Then we perform optical coherence tomography, electroretinography and molecular measurements.

Our aim is to find the most sensitive cell types and to understand the pathogenesis of ischemic retinopathy in time-dependent manner. Afterwards we would like to investigate the role of endogenous pituitary adenylate cyclase activating polypeptide (PACAP), which is a retinoprotective neuropeptide.

In summary, our aim is to understand the pathogenesis of ischemic retinopathy and to find new potential therapeutic targets.

## AMBITIONS AND CAREER GOALS

Our research group aims to understand the pathogenesis of various common retinal diseases and to find new potential therapeutic targets. In addition, we would like to investigate the role and protective effects of PACAP in these diseases. During my university years, I would like to master as many techniques as possible and improve professionally to become the best researcher/physician I can be.

#### **HONORS AND PRIZES**

**PUBLICATIONS**