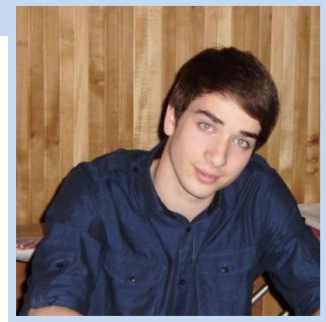


# Curriculum vitae

## Personal Information

**Name:** Márton I. Mayer  
**Place and date of birth:** Budapest, 6 July 1993  
**Nationality:** Hungarian  
**E-mail address:** mayer.marton@tdk.koki.mta.hu



## Education

**2012-** Szent István University, Faculty of Veterinary Science, BSc in Biology, Budapest  
**2006-2012** Városmajori Secondary School, Budapest  
**2000-2006** Szabó Lőrinc Elementary School, Budapest

## Languages

**English** advanced (C1) level  
**Italian** intermediate (B2) level

## Research Experience

**2013-** *Laboratory:* Workgroup of Quantitative Functional Anatomy, Department of Cellular and Network Neurobiology, Institute of Experimental Medicine, Hungarian Academy of Sciences  
*Supervisor:* Dr. Gabor Nyiri  
*Scientific topic:* The functional neuroanatomy of the median raphe and its connections in the mouse forebrain  
*Expertise:* animal surgery, perfusion, immuno-histochemistry, confocal microscopy, design-based stereology,

## Awards

**2014** Stephen W. Kuffler Research Scholarship  
Scholarship of the Hungarian Republic  
1<sup>st</sup> place poster presentation at the From Medicine to Bionics 2<sup>nd</sup> European Ph.D. Conference, Budapest, Hungary  
1<sup>st</sup> place at the Semmelweis University Scientific Students' Associations Conference, Budapest, Hungary  
1<sup>st</sup> place at the XIX. Korányi Frigyes Scientific Forum, Budapest, Hungary

## Conference Attendance

- 2014** FEPS 2014 Congress, Budapest, Hungary, poster presentation  
From Medicine to Bionics 2<sup>nd</sup> European Ph.D. Conference,  
Budapest, Hungary, poster presentation  
IBRO Workshop 2014, Debrecen, Hungary, poster presentation

## Research objectives

My interest in science dates back to my childhood, when I started to realise the complexity of nature surrounding us. In secondary school I studied biology and chemistry at an advanced level and that was the time my interest for the field of neuroscience started.

During the first year of my university studies, I had a great opportunity to join the Workgroup of Quantitative Functional Anatomy lead by Dr. Gábor Nyiri, at the Institute of Experimental Medicine lead by Prof. Tamás F. Freund. Since then, my main research topic is the functional neuroanatomy of the median raphe nucleus (MR). This serotonergic mid-brain nucleus is fundamental for the modulation of forebrain neuronal networks and plays a major role in several neuropsychiatric disorders. Our laboratory showed recently that, beyond this serotonergic modulation, the MR can establish fast glutamatergic excitatory synapses on hippocampal GABAergic interneurons. Now, we examine, whether this type of glutamatergic neurotransmission is typical in other forebrain connections of the MR in the mouse brain. During my studies, so far, I had the opportunity to practice and employ several different neuroanatomical techniques, like track-tracing methods, immunohistochemistry, confocal microscopy and design-based stereological methods. Our observations can help us to understand the real functions of the MR, as well as its role in neuropsychiatric disorders.

In the future, I would like to continue my work with similar motivation and commitment and to pursue a career in neuroscience research.