# Iveta Vojtechova, MSc.

Birth date: 23. 10. 1989 Nationality: Czech

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#### **Education:**

Charles University in Prague, First Faculty of Medicine

Katerinska 32, 121 08 Prague 2, Czech Republic 2014–Present **Neurosciences (PhD study)** 

Charles University in Prague, Faculty of Science

Albertov 6, 128 43 Prague 2, Czech Republic

2012–2014 Animal Physiology (Master's degree)

2009–2012 **Biology (Bachelor's degree)** 

High school Benesov

Husova 470, 256 01 Benesov, Czech Republic 2001–2009

# Graduation of PhD study (planned date): 2020

#### **Doctoral thesis:**

Memory and cognitive coordination impairment in rat models of neuropsychiatric diseases

## **Master thesis:**

Separation of hippocampal functions in Morris water maze and in active place avoidance by alternation protocol

#### **Bachelor thesis:**

Inhibitors of axonal regeneration and their importance for neuroplasticity, behavior and memory

#### **Employment:**

1/2015–Present National Institute of Mental Health

Topolova 748, 250 67 Klecany, Czech Republic

(part-time)

10/2012–Present Institute of Physiology CAS, Dpt. Neurophysiology of Memory

Videnska 1083, 142 20 Prague 4, Czech Republic

(10/2012–4/2014 agreement to perform work; from 5/2014 part-time)

#### **Experience:**

- Work on animal models of neuropsychiatric disorders
- Behavioral experiments on laboratory rats (spatial and cognitive tasks, emotionality, social behavior etc.)

- Ultrasonic vocalization monitoring of laboratory rats in models of psychiatric diseases
- Experimental manipulations with pregnant female rats and pups
- Experience with manipulations with SPF rats behind barrier
- Pharmacological experiments (i.p., s.c., intracerebral drug application)
- Recording and analyzing behavior by ethological software
- Nissl staining
- BrdU-staining of newborn neurons
- Stereotaxic operations
- PCR, gel electrophoresis

#### **Projects:**

- Grant no. 304 (Internal Funding Competition in NIMH): "Morphological and histopathological changes in a neurodevelopmental model of schizophrenia" (1/2019–6/2019)
- Student grant GA UK no. 172515: "Does an application of lipopolysaccharide (LPS) represent a valid neurodevelopmental model of schizophrenia?" (2015–2017)

## **Foreign visits:**

6.–14. 11. 2014 Visit of the lab of prof. Warren Meck, an expert in time perception and

time-space cognition

Psychology & Neuroscience, Duke University, Durham, USA

10. 12. 2013 Visit of the Behavioral Neuroscience lab, which belongs to the top in a

research field of ultrasonic vocalization of laboratory rodents **Experimental and Physiological Psychology, Behavioral Neuroscience, Philipps-Universität Marburg, Germany** 

### **Courses:**

FENS Training School – Auditory Neuroscience (9.–11. 9. 2013, Prague, Czech Republic)

# Other professional activities:

13. 11. 2014:

• Invited lecture "Behavioral separation as a model of executive functions in intact rats and in animal model of schizophrenia"

Psychology & Neuroscience, Duke University, Durham, USA

Since 2014:

Participation on *Memory Park* outreach project organized by IPHYS CAS

10. 12. 2013:

• Invited lecture "Separation of hippocampal functions in Morris water maze and in active place avoidance by alternance protocol"

Philipps-Universität, Marburg, Germany

**Foreign languages:** English – advanced

German – beginner

#### **Publications:**

<u>Vojtechova I</u>, Petrasek T, Maleninska K, Brozka H, Tejkalova H, Horacek J, Stuchlik A, Vales K (2018). Neonatal immune activation by lipopolysaccharide causes inadequate emotional responses to novel situations but no changes in anxiety or cognitive behavior in Wistar rats. *Behav Brain Res*, 349:42-53.

<u>Vojtechova I</u>, Petrasek T, Hatalova H, Pistikova A, Vales K, Stuchlik A (2016). Dizocilpine (MK-801) impairs learning in the active place avoidance task but has no effect on the performance during task/context alternation. *Behav Brain Res*, 305:247-57.

Petrasek T, <u>Vojtechova I</u>, Lobellova V, Popelikova A, Janikova M, Brozka H, Houdek P, Sladek M, Sumova A, Kristofikova Z, Vales K, Stuchlik A (2018). The McGill transgenic rat model of Alzheimer's disease displays cognitive and motor impairments, changes in anxiety and social behavior, and altered circadian activity. *Front Aging Neurosci*, 10:250. (The publication got the Award of Dr. Jan Bures for the best scientific publication from the Alzheimer endowment fund, and the Young neuroscientist award from the Czech Neuroscience Society.)

Petrasek T, Skurlova M, Maleninska K, <u>Vojtechova I</u>, Kristofikova Z, Matuskova H, Sirova J, Vales K, Ripova D, Stuchlik A (2016). A rat model of Alzheimer's disease based on Abeta42 and pro-oxidative substances exhibits cognitive deficit and alterations in glutamatergic and cholinergic neurotransmitter systems. *Front Aging Neurosci*, 8:83.

Petrasek T, Prokopova I, Sladek M, Weissova K, <u>Vojtechova I</u>, Bahnik S, *et al.* (2014). Nogo-A-deficient transgenic rats show deficits in higher cognitive functions, decreased anxiety, and altered circadian activity patterns. *Front Behav Neurosci*, 8:90.

# **Conference presentations (lectures and selected posters):**

- <u>Vojtechova I</u>: Lecture "Is it possible to study Alzheimer's disease in the rat?". Conference of Ageing, Prague, Czech Republic, 19-20 October 2018.
- <u>Vojtechova I, Kutna V, Maleninska K, Petrasek T, Klovrza O, Tuckova K, Stuchlik A: Schizophrenia-like behavior and decreased density of PV+ interneurons in a rat model of maternal immune activation. 12th Conference of the Czech Neuroscience Society (CNS) 2019, Prague, 26-27 November 2019.</u>
- <u>Vojtechova I</u>, Maleninska K, Kutna V, Petrasek T, Klovrza O, Tuckova K, Stuchlik A: Maternal immune activation in the rat: Do we model schizophrenia, or autism? 48th Meeting of the European Brain and Behaviour Society (EBBS) 2019, Prague, 21-24 September 2019.
- \*<u>Vojtechova I,</u> Maleninska K, Kutna V, Petrasek T, Klovrza O, Stuchlik A: Maternal immune activation in the rat: Do we model schizofrenia or autism? 9th Neuropsychiatric Forum Conference, Prague, April 24-26, 2019.
- <u>Vojtechova I</u>, Petrasek T, Klovrza O, Waltereit R: Ontogeny of social behavior and communication in the Eker rat model of autism. 11th FENS Forum of Neuroscience 2018, Berlin, Germany, 7-11 July 2018.

- <u>Vojtechova I,</u> Maleninska K, Petrasek T, Vales K, Stuchlik A: When pregnant rat female becomes ill: effect on offspring behaviour. 47th EBBS Meeting 2017, Bilbao, Spain, 8-11 September 2017.
- \*<u>Vojtechova I, Maleninska K, Petrasek T, Vales K, Stuchlik A: When pregnant rat female</u> becomes ill: effect on offspring behaviour. 7th Neuropsychiatric Forum Conference, Prague, April 19-21, 2017.
- <u>Vojtechova I</u>, Maleninska K, Petrasek T, Tejkalova H, Horacek J, Vales K, Stuchlik A: Prenatal/Neonatal immune activation by lipopolysaccharide increases the sensitivity to MK-801 in the rat model of schizophrenia. 10th FENS Forum of Neuroscience 2016, Copenhagen, Denmark, 2-6 July 2016.
- <u>Vojtechova I, Maleninska K, Petrasek T, Tejkalova H, Horacek J, Vales K, Stuchik A:</u>
  Prenatal exposure to bacterial lipopolysaccharide as a model of schizophrenia in the rat.
  58th Czech and Slovak Psychopharmacological Conference, Jesenik, Czech Republic, January 6-10, 2016.
- <u>Vojtechova I, Svoboda J, Stankova A, Petrasek T, Stuchlik A: Anterior cingulate cortex in</u> remote memory, cognition and anxiety. 5th Neuropsychiatric Forum Conference, Prague, Czech Republic, April 22-24, 2015.
- <u>Vojtechova I, Petrasek T, Pistikova A, Svoboda J, Vales K, Stuchlik A: Task/context alternation and behavioral temporal separation as an animal model of executive functions. 44th Annual Meeting of the Society for Neuroscience 2014, Washington, DC, USA, November 15-19, 2014.</u>
- \*Vojtechova I, Petrasek T, Pistikova A, Stuchlik A: Task/Context alternation and behavioral separation as a model of executive functions. 4th Neuropsychiatric Forum Conference, Prague, April 23-25, 2014.
- <u>Vojtechova I</u>, Petrasek T, Sichova K, Bahnik S, Schonig K, Tews B, Schwab ME, Bartsch D, Stuchlik A: Behavioral characterization of Nogo-A knockdown, rats with LE/SD F1 genetic background. FENS Featured Regional Meeting, Prague, Czech Republic, September 11-14, 2013.

<sup>\*</sup>The best poster award.