



Curriculum Vitae

Personal information **Michal Bencze**

Work experience

1. Employer: State Institute for Drug Control, Czechia
 - Start date: 02/2025
 - Position: **Head of the Non-clinical and Bioanalysis Assessment Unit**
 - Activities: Managing unit operations and ensuring thorough assessment of pre-clinical data, biostatistics and bioanalysis.
2. Employer: State Institute for Drug Control, Czechia
 - Start date: 08/2021, End date: 01/2022
 - Position: **Non-clinical Assessor**
 - Activities: Evaluation of nonclinical documentation accompanying market authorisation applications.
3. Employer: State Institute for Drug Control, Czechia
 - Start date: 07/2020, End date: 07/2021
 - Position: **Clinical Assessor**
 - Activities: Evaluation of clinical documentation accompanying market authorisation applications.
4. Employer: Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences
 - Start date: 11/2016, End date: 06/2020
 - Position: **Research associate, Postdoctoral Fellow**
 - Activities: Nonclinical testing of anti-obesity and neuroprotective drugs.
5. Employer: Institute of Physiology, Czech Academy of Sciences
 - Start date: 09/2012, End date: 06/2020
 - Position: **Research associate, Postdoctoral Fellow**
 - Activities: Cardiovascular research in the field of experimental hypertension.

Education and training

1. Subject: Faculty of Science, Charles University in Prague, Czechia
 - Start date: 09/2012
 - End date: 05/2017
 - Qualification: **Ph.D., Animal Physiology**
2. Subject: Faculty of Science, Charles University in Prague, Czechia
 - Start date: 09/2010
 - End date: 05/2012
 - Qualification: **Master of Science, Animal Physiology**
3. Subject: Faculty of Science, Charles University in Prague, Czechia
 - Start date: 09/2006
 - End date: 05/2010
 - Qualification: **Bachelor of Science, Biology**

Additional information

Publications

Bencze M, Boroš A, Behuliak M, Vavřínová A, Vaněčková I, Zicha J. Changes in cardiovascular autonomic control induced by chronic inhibition of acetylcholinesterase during pyridostigmine or donepezil treatment of spontaneously hypertensive rats. Eur J Pharmacol. 2024; 971:176526.

Behuliak M, Bencze M, Boroš A, Vavřínová A, Vodička M, Ergang P, Vaněčková I, Zicha J. Chronic inhibition of angiotensin converting enzyme lowers blood pressure in spontaneously hypertensive rats by attenuation of sympathetic tone: The role of enhanced baroreflex sensitivity. Biomed Pharmacother. 2024; 176:116796.

- Vavřínová A, Behuliak M, Vodička M, [Bencze M](#), Ergang P, Vaněčková I, Zicha J. **More efficient adaptation of cardiovascular response to repeated restraint in spontaneously hypertensive rats: the role of autonomic nervous system.** *Hypertens Res.* 2024; 47:2377-2392.
- Neckář J, Alánová P, Olejníčková V, Papoušek F, Hejnová L, Šilhavý J, Behuliak M, [Bencze M](#), Hrdlička J, Vecka M, Jarkovská D, Švíglerová J, Mistrová E, Štengl M, Novotný J, Ošťádal B, Pravenec M, Kolář F. **Excess ischemic tachyarrhythmias trigger protection against myocardial infarction in hypertensive rats.** *Clin Sci (Lond).* 2021; 135(17):2143-2163.
- [Bencze M](#), Vavřínová A, Zicha J, Behuliak M. **Pharmacological suppression of endogenous glucocorticoid synthesis attenuated blood pressure and heart rate response to acute restraint in Wistar rats.** *Physiol Res.* 2020; 69(3):415-426.
- Kořínková L, Holubová M, Neprašová B, Hrubá L, Pražienková V, [Bencze M](#), Haluzík M, Kuneš J, Maletínská L, Železná B. **Synergistic effect of leptin and lipidized PrRP on metabolic pathways in ob/ob mice.** *J Mol Endocrinol.* 2020; 64(2):77-90.
- Vavřínová A, Behuliak M, [Bencze M](#), Vodička M, Ergang P, Vaněčková I, Zicha J. **Sympathectomy-induced blood pressure reduction in adult normotensive and hypertensive rats is counteracted by enhanced cardiovascular sensitivity to vasoconstrictors.** *Hypertens Res.* 2019; 42(12):1872-1882.
- Vavřínová A, Behuliak M, [Bencze M](#), Vaněčková I, Zicha J. **Which sympathoadrenal abnormalities of adult spontaneously hypertensive rats can be traced to a prehypertensive stage?** *Hypertens Res.* 2019; 42(7):949-959.
- Maletínská L, Popelová A, Železná B, [Bencze M](#), Kuneš J. **The impact of anorexigenic peptides in experimental models of Alzheimer's disease pathology.** *J Endocrinol.* 2019; 240(2):R47-R72.
- Holubová M, Hrubá L, Popelová A, [Bencze M](#), Pražienková V, Gengler S, Kratochvílová H, Haluzík M, Železná B, Kuneš J, Hölscher C, Maletínská L. **Liraglutide and a lipidized analog of prolactin-releasing peptide show neuroprotective effects in a mouse model of β -amyloid pathology.** *Neuropharmacology.* 2019; 144:377-387.
- Behuliak M, [Bencze M](#), Polgárová K, Kuneš J, Vaněčková I, Zicha J. **Hemodynamic Response to Gabapentin in Conscious Spontaneously Hypertensive Rats.** *Hypertension.* 2018; 72(3):676-685.
- Behuliak M, [Bencze M](#), Vaněčková I, Kuneš J, Zicha J. **Basal and Activated Calcium Sensitization Mediated by RhoA/Rho Kinase Pathway in Rats with Genetic and Salt Hypertension.** *Biomed Res Int.* 2017; 2017:8029728.
- [Bencze M](#), Behuliak M, Vavřínová A, Zicha J. **Altered contractile responses of arteries from spontaneously hypertensive rat: The role of endogenous mediators and membrane depolarization.** *Life Sci.* 2016; 166:46-53.
- Misárková E, Behuliak M, [Bencze M](#), Zicha J. **Excitation-contraction coupling and excitation-transcription coupling in blood vessels: their possible interactions in hypertensive vascular remodeling.** *Physiol Res.* 2016; 65(2):173-91.
- Behuliak M, Vavřínová A, [Bencze M](#), Polgárová K, Ergang P, Kuneš J, Vaněčková I, Zicha J. **Ontogenetic changes in contribution of calcium sensitization and calcium entry to blood pressure maintenance of Wistar-Kyoto and spontaneously hypertensive rats.** *J Hypertens.* 2015; 33(12):2443-54.
- [Bencze M](#), Behuliak M, Vavřínová A, Zicha J. **Broad-range TRP channel inhibitors (2-APB, flufenamic acid, SKF-96365) affect differently contraction of resistance and conduit femoral arteries of rat.** *Eur J Pharmacol.* 2015; 765:533-40.
- Brunová A, [Bencze M](#), Behuliak M, Zicha J. **Acute and chronic role of nitric oxide, renin-angiotensin system and sympathetic nervous system in the modulation of calcium sensitization in Wistar rats.** *Physiol Res.* 2015; 64(4):447-57.
- Zicha J, Behuliak M, Pintérová M, [Bencze M](#), Kuneš J, Vaněčková I. **The interaction of calcium entry and calcium sensitization in the control of vascular tone and blood pressure of normotensive and hypertensive rats.** *Physiol Res.* 2014; 63:S19-27.
- Behuliak M, Pintérová M, [Bencze M](#), Petrová M, Lišková S, Karen P, Kuneš J, Vaněčková I, Zicha J. **Ca²⁺ sensitization and Ca²⁺ entry in the control of blood pressure and adrenergic vasoconstriction in conscious Wistar-Kyoto and spontaneously hypertensive rats.** *J Hypertens.* 2013; 31(10):2025-35.
- [Bencze M](#), Behuliak M, Zicha J. **The impact of four different classes of anesthetics on the mechanisms of blood pressure regulation in normotensive and spontaneously hypertensive rats.** *Physiol Res.* 2013; 62(5):471-8.

[Projects](#)

[Memberships](#)

[Other Relevant Information](#)