

CURRICULUM VITAE

of
Ivo JURÁNEK

Affiliation: Centre of Experimental Medicine of the Slovak Academy of Sciences
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Education / Degrees:

1987 MMedSc – physician-biochemist, Russian State Medical University, Moscow, Russia
1988 MSc – biochemistry, Natural Sciences School, Charles University, Prague, Czech Republic
1996 PhD – pharmacology, Faculty of Pharmacy, Comenius University, Bratislava, Slovakia
2015 DSc – pharmacology / Research Professor, P.J. Safarik University, Kosice, Slovakia

Main Research Projects:

1989-1992 Role of reactive oxygen species (ROS) in hypoxia-reoxygenation induced tissue injury; screening of prospective antioxidants of natural and synthetic origin
1992-1996 Electrophysiological investigation of $[Ca^{2+}]_i$ fluctuations in smooth muscle cells due to hypoxia-reoxygenation using the technique of *patch-clamp* and FURA-2 fluorescence
1993-1996 Study of functions of central and peripheral endings of nerve pain-sensitive C-fibres and underlying mechanisms of afferent sensation and neurogenic inflammation
1997-1999 Study of arachidonate oxygenases catalysis under hypoxic condition *in vitro* and *in vivo*; searching for a selective and potent inhibitor of platelet type 12-lipoxygenase
2000-2001 Studying the role of adenosine in atrio-ventricular node conduction disturbances during hypoxia and reoxygenation in isolated perfused heart preparation
2001-2003 Study of the processes involved in α -adrenergic modulation of β -adrenergic activation of L-type Ca^{2+} channels in ventricular myocytes using *patch-clamp* technique
2004-2007 Role of adenosine in AVN node conduction disturbances under hypoxia/reoxygenation using the Langendorff isolated heart preparation
2008-2011 Study on birth asphyxia: Cerebral energy metabolism studied by magnetic resonance as a basis for studying mechanisms of hypoxia-ischemic damage of the neonatal brain
2012-2015 Cerebral energy metabolism failure as major patho-biochemical mechanism involved in hypoxic-ischemic insult of the neonatal brain: Contribution to understanding of birth asphyxia pathology via up-to-date tools of multimodal *in vivo* and *ex vivo* imaging
2016-2019 Study on birth asphyxia: Prevention of hypoxic-ischemic damage of the neonatal rat brain by novel original strategies of pharmacological and non-pharmacological intervention(s)
2020-2023 Experimental therapy of neonatal hypoxic-ischemic encephalopathy (nHIE): potentiation of hypothermic neuroprotection by melatonin in newborn rats

Awards:

1993-1994 Fellowship of the Austrian Federal Ministry of Science and Research for the stay at the Nobel Price Laureate Otto Loewi's Institute of Experimental & Clinical Pharmacology (IECP), Graz Medical University, Austria (Laboratory of Prof. F.Lembeck – President of IUPHAR)
1995-1996 Fellowship of the Pain Research Committee of the Austrian Academy of Sciences for the stay in IECP, Medical University of Graz, Austria (Prof. F.Lembeck's Lab), funded by the Pain Research Committee of the Austrian Academy of Sciences
1997-1999 Fellowship of the Japan Society for the Promotion of Science (JSPS), Biochemistry Dept (Prof. S.Yamamoto - Vicepresident Jap. Bioch. Soc.), Tokushima University School of Medicine, Japan
2000-2001 Visiting Professor to the Department of Anesthesiology (Prof. N.Gravenstein, Head), Shands Hospital, University of Florida School of Medicine, Gainesville, Florida, USA
2001-2002 Visiting Professor to the Department of Physiology & Biophysics (Prof. A.Scarpa, Head), Case Western Reserve University School of Medicine, Cleveland, Ohio, USA
2011-2012 Visiting Professor to the Cell Culture & Tumor Immunology Laboratory (Prof. S.M.Singh, Head), School of Biotechnology, Banaras Hindu University, Varanasi, India
2017 Visiting Professor to the Institute of Microbiology (Prof. V.Havlicek, Lab Head), Czech Academy of Sciences (CAS), Prague, Czech Republic
2018-2019 Visiting Professor to the Institute of Physiology (Prof. J.Otahal, Deputy), CAS, Prague, Czechia
2019 Visiting Professor to the Institute of Pharmacology (Prof. O.Slanar, Head), Charles University \dagger^{st} Medical School & General University Hospital, Prague, Czech Republic

Projects: Principal / Deputy and/or General Investigator of 18 domestic & 7 international projects

Supervisor: seven PhD students and three MSc students defended

Publications: author of >80 *peer review* papers and Book Chapters, with >900 SCI citations
H-index: 15 (Scopus/WoS SCI; w/o self citations)

Conference Papers / Invited Lectures: 113 / 16

