

Curriculum Vitae

Personal Information	Lukas Valihrach, Ph.D. V Zapoli 1253/29, Prague 4, 14100 Czech Republic Telephone +420 325 873 748 E-mail lukas.valihrach@ibt.cas.cz Researcher ID / ORCID H-4368-2014 / 0000-0002-6704-4337 Web Publons , GoogleScholar , LinkedIn , Twitter labgenexp.eu/lukas-valihrach-phd Nationality Czech Date of Birth 26. 10. 1984 Sex male
Education	Ph.D. September 2009 - May 2013 Institute of Chemical Technology / Prague, Czech Republic - Expression of enterotoxin genes in <i>Staphylococcus aureus</i> Bachelor and Master Degree with honors. In 2012 received Votočkovovo stipendium - the highest award for outstanding Ph.D. students.
Research Positions	Senior Scientist February 2013 – Present / Vestec, Czech Republic Institute of Biotechnology CAS , Laboratory of Gene Expression - Single-cell and spatial transcriptomics - Glial cell biology in acute and neurodegenerative disorders Visiting Scientist June 2022 – Present / Prague, Czech Republic Institute of Experimental Medicine CAS , Department of Cellular Neurophysiology
Fellowships	TATAA Biocenter June 2014 – August 2014 / Gothenburg, Sweden - Product development (miRNA detection) Department of Veterinary and Animal Sciences , University of Copenhagen March 2010 – July 2010 / Copenhagen, Denmark - Regulation studies in <i>Staphylococcus aureus</i>
Memberships	Member of Federation of European Neuroscience Societies , Czech Neuroscience Society , Czech Medical Association of J. E. Purkyně and RNA Society Board member of Bioinformatics doctoral programme (UCT Prague)
Grants	GACR 23-05327S - main applicant GACR 19-02046S , 16-10214S and NU21-08-00286 - co-applicant EJPRD19-256 , GACR 23-06269S, 22-10660S , 20-05770S , 18-21942S , 17-04034S and 13-02154S - team-member* (*key worker, responsible for grant management, results, reporting)
Technology Development	Two-tailed RT-qPCR RT-qPCR system for miRNA quantification (WO2016027162A3). Developed in collaboration with TATAA Biocenter , licensed to Roche and BioVendor .

Publications	
Total number	29 (October 2022, WoS)
In last 5 years	18 (October 2022, WoS)
Number of citations	584 (October 2022, WoS)
H-index	16 (October 2022, WoS)
Selected publications in last 5 years	<ul style="list-style-type: none"> • ISL1 is necessary for auditory neuron development and contributes toward tonotopic organization. Filova I, Pysanencko K, Tavakoli M, Vochyanova S, Dvorakova M, Bohuslavova R, Smolik O, Fabriciova V, Hrabalova P, Benesova S, Valihrach L, Cerny J, Yamoah EN, Syka J, Fritzsich B, Pavlinkova G. Proc Natl Acad Sci U S A. 2022 Sep 13;119(37):e2207433119. IF = 11.205. • Small RNA-Sequencing for Analysis of Circulating miRNAs: Benchmark Study. Androvic P, Benesova S, Rohlova E, Kubista M, Valihrach L. J Mol Diagn. 2022 Jan 23:S1525-1578(22)00011-3. IF = 5.568. • Tutorial: Guidelines for Single-Cell RT-qPCR. Zucha D, Kubista M, Valihrach L. Cells. 2021; 10(10):2607. IF = 6.700. • Transient astrocyte-like NG2 glia subpopulation emerges solely following permanent brain ischemia. Kirdajova D, Valihrach L, Valny M, Kriska J, Krocianova D, Benesova S, Abaffy P, Zucha D, Klassen R, Kolenicova D, Honsa P, Kubista M, Anderova M. Glia. 2021 Jul 27. IF = 7.452. • Decoding the transcriptional response to ischemic stroke in young and aged mouse brain. Androvic P, Belov Kirdajova D, Tureckova J, Zucha D, Rohlova E, Abaffy P, Kriska J, Anderova M, Kubista M, Valihrach L. Cell Rep. 2020 Jun 16;31(11):107777. IF = 9.423. • Performance Comparison of Reverse Transcriptases for Single-Cell Studies. Zucha D, Androvic P, Kubista M, Valihrach L. Clin Chem. 2019 Nov 7. pii: clinchem.2019.307835. IF = 8.327. • Circulating miRNA analysis for cancer diagnostics and therapy. Valihrach L, Androvic P, Kubista M. Mol Aspects Med. 2019 Oct 18:100825. IF = 14.235. • Two-tailed RT-qPCR: a novel method for highly accurate miRNA quantification. Androvic P, Valihrach L, Elling J, Sjoback R, Kubista M. Nucleic Acids Res. 2017;45(15):e144. IF = 11.147.
Collaborations	<ul style="list-style-type: none"> • Institute of Experimental Medicine, Czech Academy of Sciences, Czech Republic • Institute of Neuroscience and Physiology, University of Gothenburg, Sweden • UMC Utrecht Brain Center, Utrecht University, Netherlands • Wroclaw University of Environmental and Life Sciences, Poland • Lund Stem Cell Center, Lund University, Sweden
Lecturing	International qPCR, QC and miRNA courses organized by TATAA Biocenter Single-cell gene expression analysis - PhD course at Faculty of Science, Charles University
Students	supervised/-ing 1 postdoc, 7 PhD, 3 MSc and 1 Bc students 1 PhD thesis, 3 MSc theses, 1 Bc thesis defended
Invited Lectures	7th Gene Quantification Event qPCR dPCR & NGS 2017 , Single Cell Europe Conference 2018 , 7th European Stroke Conference - ESOC 2021 , 3rd International Symposium on Microgenomics 2021 , 1st 10x genomics experience meeting 2022 , 10x Genomics 2022 MIDDLE EAST AND AFRICA User Group Meeting
Media	vzacni.cz , idnes.cz , studio6 , nature.com , tyden.cz , chemagazin.cz