

Vojtěch Čermák

contact: vojtech.cermak@natur.cuni.cz

Education

- 2012 – 2021** Doctoral degree in the Department of Plant Experimental Biology, Faculty of Science, Charles University, Prague, CZ
specialization: Experimental Plant Biology
thesis: Dynamics and variability of induced transgene silencing in tobacco cell line BY-2; *supervisor:* Lukáš Fischer
- 2010 – 2012** Master's degree in the Department of Plant Experimental Biology, Faculty of Science, Charles University, Prague, CZ
specialization: Cellular and Molecular Biology of Plants
thesis: Study of the mechanism of posttranscriptional and transcriptional transgene silencing in tobacco BY-2 cell line; *supervisor:* Lukáš Fischer
- 2007 – 2010** Bachelor's degree, Faculty of Science, Charles University, Prague, CZ
specialization: Biology
thesis: RNA interference in plants; *supervisor:* Lukáš Fischer

Research experience

- 2022 – Present** Plant Reproduction Evolution Lab, Department of Botany, Faculty of Science, Charles University, Prague, CZ
position: Research assistant
job description: Preparing transcriptome of *A. arenosa* endosperm
supervisor: Clément Lafon Placette
- 2019 – 2020** Laboratory of Pollen Biology, Institute of Experimental Botany ASCR, Prague, CZ
position: Research assistant
job description: Conducting ChIP-seq of selected TFs
supervisor: David Honys
- 2012 – Present** Laboratory of Plant Cell Biology and Biotechnology, Department of Plant Experimental Biology, Faculty of Science, Charles University, Prague, CZ
position: Research assistant
job description: Utilizing molecular biology (cloning, PCR methods, northern/southern/western blotting...), bioinformatic (NGS data analyses...) and cytologic methods (flow cytometry)
supervisor: Lukáš Fischer

Teaching experience

- 2014 – Present** Department of Plant Experimental Biology, Faculty of Science, Charles University, Prague, Czech Republic
participation in courses: Practical course of plant physiology, Plant cell and molecular biology - a practical course, Plant Epigenetics, Transposable elements: from junk DNA to Prince Major Driver of biodiversity
supervised works:
supervised defended works: 1x bachelor's thesis (Jakub Chromý 2017), 2x master's thesis (Tomáš Kašpar 2022, Kateřina Teznerová 2023), 1x high school

project SOČ/ISEF (Adéla Uhrová 2022/2023)
supervision in progress: 1x master's thesis (Kateřina Knoblochová since 2023), 2x
doctoral thesis (Tomáš Kašpar since 2022, Kateřina Teznerová since 2023)
co-supervised works: 1x bachelor's thesis, 2x master's thesis

Funding

- 2021 – 2023** GAUK – The role of the AGO-hook domain of histone chaperone SPT6L in chromatin modifications; *role*: Supervisor, Pricipal Researcher: Tomáš Kašpar
- 2013 – 2015** GAUK – Transition from posttranscriptional to transcriptional transgene silencing and involvement of SPT6-L in RNA interference in plants; *role*: Pricipal Researcher
- 2012 – 2016** STARS program – Induction and maintenance of posttranscriptional and transcriptional transgene silencing in tobacco cell line BY-2

Publications

ORCID ID: 0000-0001-9466-3654

6 peer-reviewed publications, 3 as the first author, 1 as corresponding (*) author, H-Index: 3

Čermák, V. & Fischer, L., 2018. Pervasive read-through transcription of T-DNAs is frequent in tobacco BY-2 cells and can effectively induce silencing. *BMC Plant Biology*, 18(1), 252.

Klíma, P., **Čermák, V.**, Srba, M., Müller, K., Petrášek, J., Šonka, J., Fischer, L. & Opatrný, Z., 2019. Plant Cell Lines in Cell Morphogenesis Research: From Phenotyping to -Omics. In F. Cvrčková & V. Žárský, eds. *Plant Cell Morphogenesis: Methods and Protocols*. Methods in Molecular Biology. New York, NY: Springer New York, pp. 367–376.

Příbylová, A., **Čermák, V.**, Tyč, D. & Fischer, L., 2019. Detailed insight into the dynamics of the initial phases of de novo RNA-directed DNA methylation in plant cells. *Epigenetics & Chromatin*, 12(1), 54.

Čermák, V., Tyč, D., Příbylová, A. & Fischer, L., 2020. Unexpected variations in posttranscriptional gene silencing induced by differentially produced dsRNAs in tobacco cells. *Biochimica et Biophysica Acta (BBA) - Gene Regulatory Mechanisms*, 1863(11), 194647.

Wiese, A.J., Steinbachová, L., Timofejeva, L., **Čermák, V.**, Klodová, B., Ganji, R.S., Limones-Mendez, M., Bokvaj, P., Hafidh, S., Potěšil, D., et al., 2021. Arabidopsis bZIP18 and bZIP52 Accumulate in Nuclei Following Heat Stress where They Regulate the Expression of a Similar Set of Genes. *International Journal of Molecular Sciences*, 22(2), 530.

Čermák, V.*, Kašpar, T. & Fischer, L., 2024. SPT6L, a newly discovered ancestral component of the plant RNA-directed DNA methylation pathway. Accepted in *Frontiers in Plant Science*

In Prague, 20. 2. 2024

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