

Curriculum Vitae

Michal Struška



Education

- 2018–2026 PhD study of Anthropology and Human Genetics at the Faculty of Science at Charles University
Dissertation thesis: *Heat stress as a constraint on running endurance of humans: the effect of body shape and environment*
- 2016–2018 Master's degree in Anthropology and Human Genetics at the Faculty of Science at Charles University
Diploma thesis: *Reconstruction of the influence of grinding technology on upper limb muscle activity*
- 2013–2016 Bachelor's degree in Ecological and Evolutionary Biology at the Faculty of Science at Charles University
Bachelor's thesis: *Throwing ability in human evolution*

Research focus

Retrospective anthropology, human ecology
Human thermoregulation
Upper limb biomechanics
Lower limb biomechanics during locomotion

Scientific and technical skills

Knowledge in topics of anatomy and biological anthropology, experience with measuring skin temperature and intestinal temperature, experience with indirect calorimetry, ability to apply basic statistical methods.

Programming and software: Microsoft Office, Python, R, SQL, C#, HTML, CSS

Languages: English, Czech

Study awards:

Master's degree: stipend for study results (2017/2018)
Bachelor's degree: stipend for study results (2015/2016)

Experience with data collection:

2019–2023	Measuring energy consumption and body temperature during endurance running.
2019	Measuring electromyography data of the lower limb during walking.
2017	Measuring electromyography data of the upper limb during the reconstruction of cereal grinding.

Participation in an archaeological excavation:

2016–2017	Všeruby – Excavations of a burial site near Pilsen, Czech Republic.
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Teaching:

Since 2020	Anthropology (Course for bachelor's students; 10 %)
Since 2019	Anthropology for teachers (Course for bachelor's students; 10 %)

Grants:

2022–2025: GAUK (324522) Influence of proportions, skin temperature, and movement velocity of body segments on heat dissipation during endurance hunting. Principal investigator; co-investigators: Vladimír Sládek (supervisor), Martin Hora, Pavla Alexia Jarešová, Vojtěch Mařík.

Conference presentations:

Struška M., Hora M., Wall-Scheffler C., Sládek V., (2024). The effect of ambient temperature on ultra-marathon performance in males and females. The 93rd Annual Meeting of the American Association of Biological Anthropologists, Los Angeles, California, March 20–23, 2024. Poster symposium presentation.

Struška M., Jarešová P. A., Hora M., Michálek T., Wall-Scheffler C., Sládek V., (2023). Impact of lower limb length on human core temperature during endurance running. The 13th Annual Meeting of the European Society for the Study of Human Evolution, Aarhus, Denmark, September 21–22, 2023. Podium presentation (Pecha Kucha).

Struška M., Hora M., Sládek V. Comparison of eight- and four-muscle model for assessment of upper limb muscle activity during cereal grinding. The 84th Annual Meeting of the American Association of Physical Anthropologists, Cleveland, Ohio, USA, March 27–30, 2019. Poster presentation.

Articles in journals with the impact factor:

Hora, M., Dattatreya, R., **Struška, M.**, Pontzer, H., Sládek, V. (2025). Human energy expenditure and thermoregulation during persistence hunting in the Namib. *Journal of Human Evolution*. 209, 103773.

- Sládek, V., Hora, M., Wall-Scheffler, C., **Struška, M.**, Berner M. (2025). Bone health: Age-related changes in diaphyseal structural properties among European Holocene humans during the last 9000 years. *Science Advances*, 11, eadx7981.
- Hora, M., Mařík, V., Dundr, M., **Struška, M.**, Sládek V. (2025). Energy expenditure during grain grinding using reciprocal quern and rotary quern. *Journal of Archaeological Science*, 180, 106292.
- Struška, M.**, Jarešová, P.A., Hora, M., Wall-Scheffler, C., Michálek, T., Sládek, V. (2024). Impact of relative lower-limb length on heat loss and body temperature during running. *American Journal of Biological Anthropology*, e25036.
- Hora, M., **Struška, M.**, Matějovská, Z., Kubový, P., Sládek, V. (2023). Muscle activity during crouched walking. *American Journal of Biological Anthropology*, 183, 79–91.
- Hora M., Pontzer H., **Struška M.**, Entin P., Sládek V., 2022. Comparing walking and running in persistence hunting. *Journal of Human Evolution*. 172, 103247.
- Struška M.**, Hora M., Rocek T.R., Sládek V., 2021. Influence of upper limb training and analyzed muscles on estimate of physical activity during cereal grinding using saddle quern and rotary quern. *PLOS ONE*. 16, e0243669.