

Curriculum vitae of Bálint Üveges

Personal information

Date and place of birth: 1984.11.22, Ajka, Hungary

Nationality: Hungarian

Family status: married

Degrees:

PhD - Biology, University of Debrecen, Hungary, 2019

MSc - Biology, University of Debrecen, Hungary, 2008

Diploma - German-Hungarian Technical Translator, University of Debrecen, Hungary, 2008

Language skills: Hungarian (mother tongue), English (fluent), German (fluent)

Informatics skills: Microsoft Office, R, Unix, bioinformatics

Current affiliation (2026-): Centre for Ecological Research, Hungarian Research Network, Budapest, Hungary

Current position: research fellow

Contact and public profiles:

uveges.balint@yahoo.de

[homepage](#)

[ORCID](#)

[Scopus](#)

[Web of Science](#)

[Google Scholar](#)

[ResearchGate](#)

[Bluesky](#)

[X](#)

Research

Main interests

Evolutionary ecology, herpetology, animal venoms and poisons, toxins, phenotypic plasticity, phylogenetics, population genomics

Scientific publications (19 papers, *h*-index: 11)

2025

1. **Üveges, B.**, Robinson, S.D., Schendel, V., Mizsei, E., Čurić, A., Dimaki, M., Ferri, V., Petrovan, S., Pozzi, A.V., Radonjić, T., Sos, T., Streicher, J.W., Strugariu, A., Sunje, E., Zamfirescu, Ş., Zinenko, O., Vetter, I., Wüster, W.: No gain from pain: lack of nociceptor activation suggests no selection for defence in the evolution of European viper venoms. *Functional Ecology* – under review
2. Sos, T., Horváth, G., Radovics, D., Mebert, K., **Üveges, B.**, Budai, M., Rák, G., Szabolcs, M., Lengyel, Sz., Mizsei, E.: Coping with climate change through diversity: variation in behavioural thermal tolerance of individuals and populations of grassland vipers (*Vipera* spp.). *Ecology and Evolution* – under review

2024

3. Móré, A., **Üveges, B.**, Simics, J., Radovics, D., Kovács, G., Bancsik, B., Wenner, B., Budai, M., Tisza, Á., Vadász, C., Mizser, S., Tóthmérész, B., Mizsei, E.: Predation on the endangered Hungarian meadow viper in pastures and hayfields: Insights from plasticine models. *Rangeland Ecology and Management*, 95: 68-76; doi: 10.1016/j.rama.2024.04.007 (D1) [pdf](#)

2023

4. Pozzi, A. V., Owens, J. B., **Üveges, B.**, Major, T., Morris, E., Graham, S., Togridou, A.,

- Papadopoulos, A. E., Wüster, W., Barlow, A.: High standing diversity masks extreme genetic erosion in a declining snake. *bioRxiv*, preprint (under review); doi: 10.1101/2023.09.19.557540 [pdf](#)
5. Radovics, D., Sos, T., Mebert, K., **Üveges, B.**, Budai, M., Rák, G., Szabolcs, M., Lengyel, S., Mizsei, E.: Voluntary thermal maximum of grassland vipers (*Vipera* spp.): environmental drivers and local adaptation. *Zoological Journal of the Linnean Society*, zlad109; doi: 10.1093/zoolinnean/zlad109 (D1) [pdf](#)
 6. **Üveges, B.**, Kalina, C., Szabó, K., Móricz, Á. M., Holly, D., Gabor, C. R., Hettyey, A., Bókony, V.: Does the glucocorticoid stress response make toads more toxic? An experimental study on the regulation of bufadienolide toxin synthesis. *Integrative Organismal Biology*, obad021: 1-13; doi: 10.1093/iob/obad021 (Q1) [pdf](#)
- 2022**
7. Kásler, A., Ujszegi, J., Holly, D., **Üveges, B.**, Móricz, Á. M., Herczeg, D., & Hettyey, A.: Metamorphic common toads keep chytrid infection under control, but at a cost. *Journal of Zoology*, 317: 159-169; doi: 10.1111/jzo.12974 (Q1) [pdf](#)
 8. Nemesházi, E., Sramkó, G., Laczkó, L., Balogh, E., Szatmári, L., Vili, N., Ujhegyi, N., **Üveges, B.**, Bókony, V.: Novel genetic sex markers reveal unexpected lack of, and similar susceptibility to, sex reversal in free-living common toads in both natural and anthropogenic habitats. *Molecular Ecology* 31: 2032-2043; doi: 10.1111/mec.16388 (D1) [pdf](#)
- 2021**
9. **Üveges, B.**, Basson, A.C., Móricz, Á. M., Bókony, V., Hettyey, A.: Chemical defence effective against multiple enemies: does the response to conspecifics alleviate the response to predators? *Functional Ecology* 35: 2294-2304; doi: 10.1111/1365-2435.13870 (D1) [pdf](#)
- 2020**
10. Nemesházi, E., Gál, Z., Ujhegyi, N., Verebélyi, V., Mikó, Z., **Üveges, B.**, Lefler, K. K., Jeffries, D. L., Hoffmann, O. I., Bókony, V.: Novel genetic sex markers reveal high frequency of sex reversal in wild populations of the agile frog (*Rana dalmatina*) associated with anthropogenic land use. *Molecular Ecology* 29: 3607-3621; doi: 10.1111/mec.15596 (D1) [pdf](#)
- 2019**
11. Hettyey, A., **Üveges, B.**, Móricz, Á. M., Drahos, L., Capon, R.J., Van Buskirk, J., Tóth, Z., Bókony, V.: Predator-induced changes in the chemical defence of a vertebrate. *Journal of Animal Ecology* 00: 1-12; doi: 10.1111/1365-2656.13083 (D1) [pdf](#)
 12. **Üveges, B.**, Szederkényi, M., Mahr, K., Móricz, Á. M., Krüzselyi, D., Bókony, V., Hoi, H., Hettyey, A.: Chemical defense of toad tadpoles under risk by four predator species. *Ecology and Evolution* 9: 6287-6299; doi: 10.1002/ece3.5202 (Q1) [pdf](#)
 13. Bókony, V., **Üveges, B.**, Verebélyi, V., Ujhegyi, N., Móricz, Á. M.: Toads phenotypically adjust their chemical defences to anthropogenic habitat change. *Scientific Reports* 9: 3163; doi: 10.1038/s41598-019-39587-3 (D1) [pdf](#)
- 2018**
14. Bókony, V., **Üveges, B.**, Ujhegyi, N., Verebélyi, V., Nemesházi, E., Csíkvári, O., Hettyey, A.: Endocrine disruptors in breeding ponds and reproductive health of toads in agricultural, urban and natural landscapes. *Science of the Total Environment* 634: 1335-1345; doi: 10.1016/j.scitotenv.2018.03.363 (D1) [pdf](#)
 15. Bókony, V., **Üveges, B.**, Móricz, Á. M., Hettyey, A.: Competition induces increased toxin production in toad larvae without allelopathic effects on heterospecific tadpoles. *Functional Ecology* 32: 667-675; doi: 10.1111/1365-2435.12994 (D1) [pdf](#)
- 2017**
16. **Üveges, B.**, Fera, G., Móricz, Á. M., Krüzselyi, D., Bókony, V., Hettyey, A.: Age- and

environment-dependent changes in chemical defences of larval and post-metamorphic toads. *BMC Evolutionary Biology* 17: 137; doi: 10.1186/s12862-017-0956-5 (Q1) [pdf](#)

2016

17. **Üveges, B.**, Mahr, K., Szederkényi, M., Bókony, V., Hoi, H., Hettyey, A.: Experimental evidence for beneficial effects of projected climate change on hibernating amphibians. *Scientific Reports* 6, 26754; doi: 10.1038/srep26754 (D1) [pdf](#)
18. Bókony, V., Móricz, Á. M., Tóth, Zs., Gál, Z., Kurali, A., Mikó, Zs., Pásztor, K., Szederkényi, M., Tóth, Z., Ujszegi, J., **Üveges, B.**, Krüzselyi, D., Hoi, H., Hettyey, A.: Variation in chemical defenses among natural populations of common toad (*Bufo bufo*) tadpoles: the role of environmental factors. *Journal of Chemical Ecology* 42: 329-338; doi: 10.1007/s10886-016-0690-2 (Q1) [pdf](#)
19. Mizsei, E., **Üveges, B.**, Vági, B., Szabolcs, M., Lengyel, Sz., Pfliegler, W.P., Nagy, Z.T., Tóth, J.P.: Species distribution modelling leads to the discovery of new populations of one of the least known European snakes, *Vipera ursinii graeca* in Albania. *Amphibia-Reptilia* 37: 55-68; doi: 10.1163/15685381-00003031 (Q1) [pdf](#)

2012

20. Mizsei, E. & **Üveges, B.**: Novel defensive behaviours in both sexes of *Vipera ursinii graeca* (Serpentes: Viperidae). *Herpetology Notes* 5: 481-483. [pdf](#)
21. **Üveges, B.**, Halpern, B., Péchy, T., Posta, J. and Komlósi, I.: Characteristics and heritability analysis of the head scales of the Hungarian meadow viper (*Vipera ursinii rakosiensis*, Méhely 1893). *Amphibia-Reptilia* 33: 393-400; doi: 10.1163/15685381-00002842 (Q2) [pdf](#)

Contributions to conferences

Talks

2026

- **Üveges B.** et al.: The complex population genomics of Eurasian vipers. PopGroup 59, Lille, France

2025

- **Üveges B.** et al.: No gain from pain: lack of nociceptor activation suggests no selection for defence in the evolution of European viper venoms. 15th Venom Day, Bangor, Wales, United Kingdom
- **Üveges B.** et al.: No gain from pain: lack of nociceptor activation suggests no selection for defence in the evolution of European viper venoms. 3rd International Online Conference on Toxins

2023

- **Üveges, B.** et al.: Does the glucocorticoid stress response make toads more toxic? An experimental study on the regulation of bufadienolide toxin synthesis. 22nd European Congress of Herpetology, Wolverhampton, United Kingdom

2018

- **Üveges, B.** et al.: Changes in the chemical defence of common toad (*Bufo bufo*) tadpoles experiencing complex environmental challenges. Conference of the International Society for Chemical Ecology, Budapest, Hungary
- **Üveges, B.**: Environmental factors shaping the variability of amphibian chemical defences. I. Evolutionary Biology Day, Budapest, Hungary

2017

- Bókony, V., **Üveges, B.** et al.: A versengés fokozott méregtermelést indukál barna varangy (*Bufo bufo*) ebihalakban. A Magyar Etológiai Társaság XIX. Kongresszusa, Dobogókő, Hungary
- **Üveges, B.** et al.: Competition induces increased toxin synthesis in tadpoles of the common toad

(*Bufo bufo*). 19th European Congress of Herpetology, Salzburg, Austria

2016

- **Üveges, B.** et al.: Inducible changes in the production of defensive chemicals during early ontogeny in the common toad (*Bufo bufo*). The Evolution of Mechanisms Workshop, Debrecen, Hungary

2015

- **Üveges, B.** et al.: Some like it mild: Positive effects of climate change on hibernation success of common toads (*Bufo bufo*). Student Conference on Conservation Science, Tihany, Hungary

2013

- **Üveges, B.** et al.: The adaptive value of predator-induced defences in *Bufo bufo* tadpoles. A Magyar Etológiai Társaság XV. Kongresszusa, Budapest, Hungary
- **Üveges, B.** et al.: The adaptive value of predator-induced defences in *Bufo bufo* tadpoles. 17th European Congress of Herpetology, Veszprém, Hungary

2010

- **Üveges, B.** et al.: Heritability analysis of head scales of *Vipera ursinii rakosiensis*. 3rd Biology of the Vipers Conference, Calci, Italy

Posters

2022

- Móré, A., Mizsei, E., Tisza, Á., Radovics, D., **Üveges, B.**: Trends in the abundance of predators of Hungarian meadow viper (*Vipera ursinii rakosiensis*) and the effect of grassland utilization on predation pressure. 21st European Congress of Herpetology, Belgrade, Serbia

2019

- **Üveges, B.** et al.: Toads respond to anthropogenic change by adjusting their chemical defence. Congress of the European Society for Evolutionary Biology, Turku, Finland

2016

- Hettyey, A., **Üveges, B.** et al.: Induced defences and their fitness-effects in *Bufo bufo* tadpoles. 16th Congress of the International Society for Behavioral Ecology, Exeter, United Kingdom

2015

- **Üveges, B.** et al.: Resource-dependent changes in the production of chemical defences during early ontogeny in the common toad (*Bufo bufo*). Conference of the International Society for Chemical Ecology, Stockholm, Sweden

2014

- **Üveges, B.** et al.: Barna varangy (*Bufo bufo*) ebihalak morfológiai és viselkedési válaszai és ezek adaptív értéke különböző ragadozók jelenlétében. A Magyar Etológiai Társaság XVI. Kongresszusa, Tihany, Hungary
- **Üveges, B.** et al.: Behavioural responses of larval common toads (*Bufo bufo*) to four predator species. European Conference on Behavioural Biology, Prague, Czech Republic

2011

- Mizsei, E. & **Üveges, B.**: Novel defensive behaviours in both sexes of *Vipera ursinii graeca* (Serpentes: Viperidae). 16th European Congress of Herpetology, Luxembourg, Luxembourg
- Mizsei, E. & **Üveges, B.**: Confirming the presence of *Vipera ursinii graeca* in Albania with regards of a new locality - preliminary results. 16th European Congress of Herpetology, Luxembourg, Luxembourg

Outreach:

- **Üveges, B.** (2021): [Toad poison is a Swiss army knife against multiple enemies](#). *Functional Ecologists*
- Verebélyi, V., Bókonyi, V., **Üveges, B.** (2018): Amphibians and water pollution (Kétéltűek és a vízszennyezés). *Élet és Tudomány* – 2018 (36): 1126-1128 – in Hungarian
- [Toad tadpoles turn homegrown poisons on each other](#). Wilcox, C., *Nature*, 2017
- **Üveges, B.**, Bókonyi, V., Hettyey, A. (2016): Amphibian crisis – Amphibians and climate change

(Kétéltűkrízis – A kételtűek és a klímaváltozás). *Természettudományi közlöny* – 147 (9): 420-421 – in Hungarian

- Why is it surprising that toads tolerate warmer winters ([Miért meglepő, hogy a varangyok bírják az enyhe telet?](#))? *Magyar Tudományos Akadémia*, 2016 – in Hungarian
- Individual poison cocktail of common toads ([Individueller Giftcocktail bei Erdkröten](#)). *Die Presse*, 2014 – in German

Reviewer for:

- Amphibia-Reptilia
- Biology Letters
- Diversity
- Ecology and Evolution
- Journal of Zoology
- PLoS One
- Proceedings of the Royal Society B

Society memberships

- British Ecological Society
- European Society for Evolutionary Biology
- Societas Europaea Herpetologica – European Society for Herpetology
- Amphibian and Reptile Conservation Association of BirdLife Hungary (MME KHVSz)

Conference organisation

- XXI. Conference of the Hungarian Ethological Society (2019), Mátrafüred, Hungary. [Program and abstracts](#)

Certificates, awards and grants

Certificates

- FELASA-C equivalent certificate for the direction of animal experiments (2016; 2010/63/EU directive of the European Parliament and Council)

Awards

- Shortlisted for the 2021 Haldane Prize - British Ecological Society
- Albert Szent-Györgyi Young Investigator Award 2018 – New York Hungarian Scientific Society
- PhD research project award 2017 – Hungarian Academy of Sciences, Council of Academic Research Institutes

Grants

2025

- “Starting” Research Project Grant (STARTING_25/153429, EUR ~325 430) - National Research, Development and Innovation Office of Hungary

2024

- School of Natural Sciences Research Support Funding (GBP 1000.8) – Bangor University

2023

- School of Natural Sciences Research Support Funding (GBP 1497) – Bangor University
- Taith Research Mobility Scheme (GBP 3150) – Welsh Government / Bangor University

2022

- Bangor Fund (GBP 5670) – Bangor University
- School of Natural Sciences Research Support Funding (GBP 903) – Bangor University

2020

- Leverhulme Research Project Grant (RPG-2020-345, as co-author, GBP 185 084) – Leverhulme Trust
- 'OTKA' postdoctoral excellence program (PD_20/134483, EUR ~70 853) - National Research, Development and Innovation Office of Hungary

2019

- International Conference Attendance Grant for Young Scientists (INKP2019-59, EUR ~920) – Hungarian Academy of Sciences

2013

- Conservation Grant (as co-author, EUR 2000): “Conservation efforts using grazing exclusion at habitats of the endangered *Vipera ursinii graeca* in Albania” - Societas Europaea Herpetologica

Teaching & education

Teaching experience

- *lecturer* (2025-): ‘Animal venoms and poisons’ lecture series, University of Debrecen, Hungary
- *supervisor* (2023-): Bioinformatics “bootcamp”, Bangor University, United Kingdom
- *lecturer* (2011): ‘Herpetology’ lecture series, University of Debrecen, Hungary
- *supervisor* (2008-2011): Zoological field courses, University of Debrecen, Hungary
- *demonstrator* (2007-2011): Zoology seminar, University of Debrecen, Hungary

Supervision of students’ research activity

- Sonkovits, A (2026-): Population genetics of common toads in natural, agricultural and urban habitats. MSc thesis, University of Veterinary Medicine, Budapest, Hungary
- Németh, S. (2026-): Transcription rate of plastic toxin synthesis of toads. BSc thesis, Eötvös Loránd University, Budapest, Hungary
- Ferge, R. (2026-): The evolutionary ecology of the venom system of meadow vipers. BSc thesis, University of Debrecen, Debrecen, Hungary
- Bancsik, B. (2024-2026): The demographic history and ancient niches of meadow vipers. MSc thesis, Eötvös Loránd University, Budapest, Hungary
- Baines, T., Caldwell, A., Cocks, C., Gandini, A., Horn, A., Johansson, F. P., Mangan, A. (2022-2023): Using plasticine models to estimate predation rates on snakes. BSc theses, Bangor University, Bangor, Wales, United Kingdom
- Kalina, C. (2018-2020): The role of the corticosterone regulated stress response in the toxin synthesis of toads. BSc thesis, University of Veterinary Medicine, Budapest, Hungary
- Basson, A. (2018-2019): Effects of predators and conspecifics on bufadienolide production in *Bufo bufo* tadpoles. MSc thesis, Eötvös Loránd University, Budapest, Hungary
- Erőss, M. (2010): Comparison of two habitats of the Kiskunság (Hungary) based on their lizard fauna. BSc thesis, University of Debrecen, Debrecen, Hungary

Other education activities

- *presenter* (2025-): Scientific writing and publication workshop, Centre for Metagenomics, University

of Debrecen, Hungary

- *presenter* (2022-), scientific presentations for high-school students organised by the Alumni Program of the Hungarian Academy of Sciences
- *expedition leader* (2021-), herpetology expeditions involving high-school, BSc and MSc students in Italy, Hungary, Bosnia and Herzegovina, Montenegro, Greece, Romania and Ukraine
- *camp leader* (2019-), 'HerpCamp' for children by the Amphibian and Reptile Conservation Association of BirdLife Hungary (MME KHVSz)
- *organizer* (2008-2010), Herpetology Journal Club, University of Debrecen, Hungary

Previous positions

- 2025: *research fellow*, at Centre for Metagenomics, University of Debrecen, Hungary
- 2024-2025: *assistant* at Evolutionary Ecology Department, Plant Protection Institute, Centre for Agricultural Research, Hungarian Research Network, Budapest, Hungary
- 2021-2024: *postdoctoral research officer* at Molecular Ecology and Evolution in Bangor, Bangor University, Bangor, Wales, United Kingdom
- 2019 – 2021: *research fellow* at Lendület Evolutionary Ecology Research Group, Plant Protection Institute, Centre for Agricultural Research, Eötvös Loránd Research Network, Budapest, Hungary
- 2012 – 2019: *assistant research fellow* at Lendület Evolutionary Ecology Research Group, Plant Protection Institute, Centre for Agricultural Research, Eötvös Loránd Research Network, Budapest, Hungary
- 2011 – 2012: *biologist* at Blood Transfusion Centre, Debrecen, Hungary
- 2008 – 2011: *PhD student* at Department for Evolutionary Zoology and Human Biology, University of Debrecen, Hungary