



## Doriana Buda

✉ Email:

Gender: Date of birth: Nationality:

### WORK EXPERIENCE

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[ 2019 – 2021 ]

#### University research assistant

*Babeş-Bolyai University, Faculty of Biology and Geology*

**City:** Cluj-Napoca

**Country:** Romania

Project: Monitoring and risk assessment for groundwater sources in rural communities of Romania (EEA-RO-NO-2018-0138)

[ 2017 – 2020 ]

#### Teaching assistant

*Babeş-Bolyai University, Faculty of Biology and Geology*

**City:** Cluj- Napoca

**Country:** Romania

Biophysics- Laboratory

### EDUCATION AND TRAINING

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[ 2012 – 2015 ]

#### Bsc

*Babes Bolyai University, Faculty of Biology and Geology*

**City:** Cluj- Napoca

**Country:** Romania

**Field(s) of study:** Biochemistry

[ 2015 – 2017 ]

#### Msc

*Babes Bolyai University, Faculty of Biology and Geology*

**City:** Cluj- Napoca

**Country:** Romania

**Field(s) of study:** Molecular Biotechnology

[ 2017 – Current ]

#### PhD

*Babes Bolyai University, Institute for doctoral studies*

**City:** Cluj- Napoca

**Country:** Romania

**Thesis:** Molecular mechanisms of heavy metal resistance in halophilic Archaea

[ Jan 2020 – Mar 2020 ]

#### Internship- Research

*Biochemistry and Molecular Biology Area, Faculty of Science, University of Alicante*

**City:** Alicante

**Country:** Spain

## LANGUAGE SKILLS

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**Mother tongue(s):** Romanian

**Other language(s):**

**English**

**LISTENING C1 READING C1 WRITING C1**

**SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1**

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## DRIVING LICENCE

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**Cars:** B

## COMMUNICATION AND INTERPERSONAL SKILLS

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### Professional skills

- Cell and molecular biology techniques: gDNA/ RNA extraction and purification, cloning, transformation, PCR, qPCR, RNA-seq sample preparation and interpretation of the results.
- Practical knowledge of bacteriology and applied microbiology, bacterial cell cultivation and identification.
- Microbiology staining techniques: DAPI, Gram, Sudan Black B, Nile Red.
- Biophysics and biochemistry techniques: gel chromatography, gradient centrifugation, sonication, gel electrophoresis, Western blotting, microscopy.
- Strong knowledge of science and scientific methods: the ability to use scientific methodologies and procedures to investigate problems and propose meaningful and practical solutions, analysing and processing a great variety of scientific data, statistics and information, the ability to conduct scientific research into a variety of subjects and issues.

### Social skills and competences

- Teamwork
- Good communication skills
- Attention to detail, the ability to pay close attention to details, spot errors and produce accurate work
- Problem-solving
- Adaptability
- Creativity
- Good time management skills, the ability to prioritize tasks, and meet deadlines

## PUBLICATIONS

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### Scientific articles

- **Voica, D. M.**, Bartha, L., Banciu, H. L., Oren, A. (2016). Heavy metal resistance in halophilic Bacteria and Archaea. *FEMS Microbiol Lett*, 363(14).
- **Buda, D. M.**, Bulzu, P. A., Barbu-Tudoran, L., Porfire, A., Pătraș, L., Sesărman, A., ... & Banciu, H. L. (2019). Physiological response to silver toxicity in the extremely halophilic archaeon *Halomicrobium mukohataei*. *FEMS Microbiol Lett*, 366(18), fnz231.
- **Buda, D.M.**, Bulzu P.-A., Cristea, A., Banciu, H.L. (2019) The saline aquatic systems as 'natural reservoirs' for microorganisms with current and potential applications. *Aerul Apa Compon Mediu*, ISSN 2067-743X. pp. 427-434.
- Bulzu, P.-A., Cristea, A., **Buda, D.M.** and Banciu, H.L. (2019) Asgardarchaeota – a novel prokaryotic group discovered in aquatic sediments that might shed light on the origin and early evolution of Eukaryotes. *Aerul Apa Compon Mediu*, ISSN 2067-743X. pp. 435-446.
- Drugă, B., **Buda, D. M.**, Szekeres, E., Chiș, C., Chiș, I., Sicora, C. (2019). The impact of cation concentration on Microcystis (cyanobacteria) scum formation. *Sci Rep*, 9(1), 3017.
- Șuteu, A.M., Momeu, L., Battes, K.P., Baricz, A., Cristea, A., Bulzu, P.A., **Buda, D.M.**, Banciu, H.L. and Cîmpean, M., 2021. Diversity and distribution of phototrophic

primary producers in saline lakes from Transylvania, Romania. *Plant Syst Evol*, 307(1), p.12.

- Baricz, A., Levei, E.A., Şenilă, M., Pînzaru, S.C., Aluaş, M., Vulpoi, A., Filip, C., Tripon, C., Dădârlat, D., **Buda, D.M.** and Dulf, F.V., 2021. Comprehensive mineralogical and physicochemical characterization of recent sapropels from Romanian saline lakes for potential use in pelotherapy. *Sci Rep*, 11(1), p.18633.
- **Buda, D.M.**, Szekeres, E., Tudoran, L.B., Esclapez, J. and Banciu, H.L., 2023. Genome-wide transcriptional response to silver stress in extremely halophilic archaeon *Haloferax alexandrinus* DSM 27206<sup>T</sup>. *BMC Microbiol*, 23(1), p.381.

## CONFERENCES AND SEMINARS

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### Conference participations

**Buda, D.M.**, Porfire, A., Leopold, N., Tripon, S., Banciu., H.L. (2017). Biosynthesis of silver nanoparticles by the haloarchaeal strain *Halomicrobium mukohataei* DSM 12286, *YRSC Abstract Book*, pp 14-15.

- Oral presentation and abstract at Young Researchers in Sciences, International Symposium 4<sup>th</sup> edition, August 14-19, 2017, Cluj-Napoca, Romania.

**Buda, D.M.**, Tincu, S., Tripon, S., Porfire, A., Pătraş, L., Banciu, H. L. (2018). Capacity of *Halomicrobium mukohataei* to overcome the oxidative stress caused by the presence of silver salts, *RSBMB Book Of Abstracts*, pp. 59.

- Oral presentation and abstract at the Romanian Society for Biochemistry and Molecular Biology's Annual International Conference, September 5-7, 2018, Bucharest, Romania.

**Buda, D.M.**, Pinteaa, A., Dulf, F.V., Banciu, H.L. (2018). Survey of the phospholipid fatty acids composition of three Romanian salt lakes, *RSBMB Book Of Abstracts*, pp. 60.

- Abstract at the Romanian Society for Biochemistry and Molecular Biology's Annual International Conference, September 5-7, 2018, Bucharest, Romania.

Bulzu, P.-A., Cristea, A., **Buda, D.M.** and Banciu, H.L. (2019) Asgardarchaeota – a novel prokaryotic group discovered in aquatic sediments that might shed light on the origin and early evolution of eukaryotes. *Aerul si Apa: Componente ale Mediului/ Air and Water: Components of the Environment*, ISSN 2067-743X. pp. 435-446. doi: 10.24193/AWC2019\_43 [http://doi.org/10.24193/AWC2019\\_43](http://doi.org/10.24193/AWC2019_43)

- Abstract at the International Conference „Air and Water: Components of the Environment, 11<sup>th</sup> Edition, March 22-24, 2019, Cluj-Napoca, Romania.

**Buda, D.M.**, Bulzu P.-A., Cristea, A. and Banciu, H.L. (2019) The saline aquatic systems as 'natural reservoirs' for microorganisms with current and potential applications. *Aerul si Apa: Componente ale Mediului/ Air and Water: Components of the Environment*, ISSN 2067-743X. pp. 427-434. doi: 10.24193/AWC2019\_42. [http://doi.org/10.24193/AWC2019\\_42](http://doi.org/10.24193/AWC2019_42)

- Abstract at the International Conference „Air and Water: Components of the Environment, 11<sup>th</sup> Edition, March 22-24, 2019, Cluj-Napoca, Romania.

**Buda, D.M.**, Bulzu, P.-A., Barbu-Tudoran, L., Porfire, A., Patras, L., Sesarman, A, Banciu, H.L. (2019) Capacity of *Halomicrobium mukohataei* DSM 12886 to overcome silver induced stress, *Studia Universitas Babes-Bolyai, Biologia*, 64(1), pp. 77.

- Oral presentation at the 12<sup>th</sup> International Conference on Halophilic Microorganisms, June 24-28, 2019, Cluj-Napoca, Romania. Halophiles Bursary was granted following abstract submission to support the participation at the Congress.

**Buda, D.M.**, Banciu H.L. (2023) Transcriptomic profiling of halophilic archaeon *Haloferax alexandrinus* DSM 27206<sup>T</sup> grown under silver stress. *RSBMB Book of abstracts*, pp. 20.

- Abstract at the Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology, September 13-15, 2023, Cluj-Napoca, Romania,

## Seminars

- Workshop "**Perspectives on Bioinformatics in Romania**", November 24, 2017, Romanian Society of Bioinformatics, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca, Romania.
- Training courses "**Introduction to EMBL-EBI resources: Sequence search and alignment. Introduction to Ensembl**". The 2<sup>nd</sup> Romanian Bioinformatics Seminar", 18-20 April 2018, Romanian Society of Bioinformatics, Institute of Biochemistry, Bucharest, România.
- Training "**Next-Generation Sequencing Data Analysis**". The 3<sup>rd</sup> Romanian Bioinformatics Seminar", 15-16 November 2018, Romanian Society of Bioinformatics, Faculty of Mathematics and Computer Sciences, West University of Timișoara, România.
- Course "**Plotting Literacy for Genomics**", 27-28 November 2023, Romanian Society of Bioinformatics, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca, Romania.