***ANEXA 4.1***

Nume Prenume: **Farkas Ancuţa Cristina**

Gradul didactic: Șef lucrări dr.

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: de Biologie și Geologie

Departamentul: de Biologie Moleculară și Biotehnologie

**LISTA**

**lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic**

1. **Teza de doctorat**

Doctor în Biologie cu calificativul *Summa Cum Laude*, Universitatea Babeş-Bolyai, Cluj-Napoca, domeniul Biologie

Titlul tezei de doctorat: *Comunităţi microbiene în biofilmele din staţia de tratare şi reţeaua de distribuţie a apei potabile din judeţul Cluj*

Conducător ştiinţific: Prof. Dr. Mihail Drăgan-Bularda

Data susţinerii doctoratului: 20 septembrie 2012

Ordinul Ministrului Educaţiei şi Tineretului nr. 6508 din 19.12.2012, Diploma de doctor nr. 1007 din 23.02.2013

1. **Cărţi si capitole în cărţi publicate în ultimii 10 ani**
2. **Farkas, A.** (2025) *Biotehnologii farmaceutice. Ghid pentru lucrări practice*. Editura Presa Universitară Clujeană, Cluj-Napoca
3. **Farkas, A.,** Carpa, R., Butiuc-Keul, A. (2022) *Biotehnologii generale. Ghid de lucrări practice.* Editura Presa Universitară Clujeană, Cluj-Napoca, România
4. **Farkas, A.** (2021) *Biotehnologii farmaceutice.* Editura Presa Universitară Clujeană, Cluj-Napoca, România
5. Coman C, Soran ML, **Farkas A.** (2016) Prelevarea probelor de mediu pentru investigarea reziduurilor de antibiotice, a diversităţii microbiene şi a rezistenţei la antibiotic. În: Coman, C. (Ed.) *Ghid metodologic de monitorizare a antibioticelor şi a rezistenţei la antibiotice în mediul înconjurător.* Editura Accent, Cluj-Napoca, România, pp. 25-41
6. Coman C, Soran ML, **Farkas A.** (2016) Environmental sampling for investigation of antibiotic residues, microbial diversity and antibiotic resistance. In: Coman C. (Ed). *Methodological guide for monitoring antibiotics and antibiotic resistance in the environment.* Accent Publisher, Cluj-Napoca, România, pp. 201-214
7. **Farkas A.** (2016) Testarea susceptibilităţii la antibiotice prin metoda antibiogramei. În: Coman, C. (Ed.) *Ghid metodologic de monitorizare a antibioticelor şi a rezistenţei la antibiotice în mediul înconjurător.* Editura Accent, Cluj-Napoca, România, pp. 79-104
8. **Farkas A.** (2016) Antibiotic susceptibility testing by disc diffusion method. In: Coman, C (Ed.). *Methodological guide for monitoring antibiotics and antibiotic resistance in the environment.* Accent Publisher, Cluj-Napoca, România, pp. 253-276
9. **Lucrări indexate ISI/BDI publicate în ultimii 10 ani**
10. **Farkas, A.,** Butiuc-Keul, A., Carpa, R., Szekeres, E., Teban-Man, A., Coman, C. (2025). Overlooked Enterobacterales as hosts of antimicrobial resistance in aquatic environments. Scientific Reports. https://doi.org/10.1038/s41598-025-08090-3
11. Vatamanu, S.-M., Ţucureanu, M., Mihăilă, M., Butoi, E., **Farkas, A.** (2025). MΦ macrophage – N0 neutrophil dialogue in the presence of TNF-α affects the endothelium. Studia Universitatis Babeş-Bolyai Biologia 70(1), 303-326. https://doi.org/10.24193/subbbiol.2025.1.14
12. Pană, A.-G., Șchiopu, P., Țoc, D.A., Neculicioiu, V.S., Butiuc-Keul, A., **Farkas, A.,** Dobrescu, M.-Ș., Flonta, M., Costache, C., Szász, I.É., Junie, L.M. (2025) Clonality and the phenotype–genotype correlation of antimicrobial resistance in *Acinetobacter baumannii* isolates: A multicenter study of clinical isolates from Romania. Microorganisms 13, 176. https://doi.org/10.3390/microorganisms13010176
13. Carpa, R., **Farkas,** A., Dobrota, C., Butiuc-Keul, A. (2023). Double-network chitosan-based hydrogels with improved mechanical, conductive, antimicrobial, and antibiofouling properties*. Gels* 9(4), 278
14. Iordache, D., Baci, G.M., Căpriţă, O., **Farkas, A.,** Butiuc-Keul, A. (2022) Correlation between CRISPR loci diversity in three enterobacterial taxa. International Journal of Molecular Sciences 23(21), 12766
15. **Farkas, A.**, Coman, C., Szekeres, E., Teban-Man, A., Carpa, R., Butiuc-Keul, A. (2022) Molecular typing reveals environmental dispersion of antibiotic-resistant enterococci under anthropogenic pressure. Antibiotics 11(9), 1213
16. Hurdu, B.I., Coste, A., Halmagyi, A. Szatmari, P.M., **Farkas, A.**, Pușcaș, M., Turtureanu, P.D., Roșca-Casian, O., Tănase, C., Oprea, A., Mardari, C., Răduţoiu, D., Comănescu, P.C., Sîrbu, I.M., Stoie, A., Lupoae, P., Cristea, V., Jarda, I., Holobiuc, I., Goia, I., Cătană, C., Butiuc-Keul, A. (2022) Ex situ conservation of plant diversity in Romania: A synthesis of threatened and endemic taxa. Journal of Nature Conservation 68, 126211
17. Butiuc-Keul, A., Coste, A., Budahn, H., Dunemann, F., **Farkas, A.**, Postolache, D., Klocke, E. (2022) Analysis of *Hypericum* accessions by DNA fingerprinting and flow cytometry. Acta Botanica Croatica 81(1), 1-11
18. Butiuc-Keul, A., **Farkas, A.**, Carpa, R., Iordache, D. (2021) CRISPR-Cas system: The powerful modulator of accessory genomes in prokaryotes. Microbial Physiology 32(1-2), 2-17
19. Teban-Man, A., **Farkas, A.,** Baricz, A., Hegedus, A., Szekeres, E., Pârvu, M., Coman, C. (2021) Wastewaters, with or without hospital contribution, harbour MDR, carbapenemase-producing, but not hypervirulent *Klebsiella pneumoniae*. Antibiotics 10(4), 361
20. Butiuc-Keul, A., Carpa, R., Podar, D., Szekeres, E., Muntean, V., Iordache, D., **Farkas, A.** (2021) Antibiotic resistance in *Pseudomonas* spp. through the urban water cycle. Current Microbiology 78(4), 1227-1237
21. **Farkas, A.,** Mereuti, F., Butiuc-Keul, A., Podar, D., Roba, C., Bălc, R. (2020) Effects of long-term exposure to heavy metals upon rhizosphere bacteria from Baia Mare area (Maramureş County, Romania). Geomicrobiology Journal 37(9), 867-876
22. Cristea, V., Besenyei, E., Jarda, L., **Farkas, A.**, Marcu, D., Clapa, D., Halmagyi, A. Butiuc-Keul, A. (2019) *In situ* genetic variability and micropropagation of *Cerastium banaticum* (Rochel) Heuff. (*Caryophyllaceae*) – a rare and endemic species from Romania. Acta Biologica Cracoviensia 61(1), 53-62
23. Butiuc-Keul, A., Fiţ, D., **Farkas, A**. (2019) Trends in molecular biology of several fruit trees. JOJ Horticulture and Arboriculture 2(3), 555589
24. Butiuc-Keul, A., Coste, A., **Farkas, A.,** Cristea, V., Isac, V., Halmagyi, A. (2019) Molecular characterization of apple (*Malus× domestica* Borkh.) genotypes originating from three complementary conservation strategies. Turkish Journal of Agriculture and Forestry 43(5), 464-477
25. **Farkas, A.,** Tarco, E., Butiuc-Keul, A. (2019) Antibiotic resistance profiling of pathogenic *Enterobacteriaceae* from Cluj-Napoca, Romania. Germs 9(1), 17-27
26. Butiuc-Keul, A., Goia, I., Cristea, V. Fiţ, D., Şuteu, A., **Farkas, A.**, (2019) RAPD markers associated with linolenic acid synthesis in several *Boraginaceae* plant species. Analele Universităţii din Oradea. Fascicula Biologie 24(1), 62-66
27. Baricz, A., Teban, A., Chiriac, C.M., Szekeres, E., **Farkas, A.,** Nica, M., Dascălu, A., Oprişan, C., Coman, C. (2018) Investigating the potential use of an Antarctic variant of *Janthinobacterium lividum* for tackling antimicrobial resistance in a One Health approach. Scientific Reports 8(1), 15272
28. Butiuc-Keul, A., Jarda, L.,Goia, I., Holobiuc, I., **Farkas, A.,** Cristea, V. (2018) Preliminary data regarding genetic diversity of several endangered and endemic *Dianthus* species from Romania generated by RAPD markers. Studia Universitatis Babes-Bolyai, Biologia 63(1), 59-72
29. Butiuc-Keul, A., Cristea, V., Goia, I., **Farkas, A.,** Crăciunş, C. (2018) Genetic structure of several endangered and endemic *Dianthus* species revealed by microsatellite markers. Acta Botanica Croatica 77(2), 181-188
30. Szekeres, E., Baricz, A., Chiriac, C.M., **Farkas, A.,** Opriş, O., Soran, M.L., Andrei, A.S., Rudi, K, Balcazar, J.L., Dragoş, N., Coman, C. (2017) Abundance of antibiotics, antibiotic resistance genes and bacterial community composition in wastewater effluents from different Romanian hospitals. Environmental Pollution 225, 304-315
31. Ganea, I.V., Roba, C., Gligor, D., **Farkas, A.,** Bălc, R., Moldovan, M. (2017) Assessment of environmental quality in Lacu Sarat area (Braila County, Romania). Carpathian Journal of Earth and Environmental Sciences 12(2), 377-387
32. **Farkas, A.,** Tarco, E., Crăciunaş, C., Bocoş, B., Butiuc-Keul, A. (2017) Screening for phenotypic and genotypic resistance to antibiotics in Gram positive pathogens. Studia Universitatis Babes-Bolyai, Biologia 62(2), 85-96
33. Raduly, O.C., **Farkas, A.** (2017) Nitrate, nitrite and microbial denitrification in drinking water from Ozun village (Covasna County, Romania) and the association between changes during water storage. Studia Universitatis Babes-Bolyai, Biologia 62(1), 17-28
34. **Farkas, A.,** Bocoş, B., Butiuc-Keul, A. (2016) Antibiotic resistance and intI1 carriage in waterborne Enterobacteriaceae. Water, Air, & Soil Pollution 227(7), 251
35. **Farkas, A.,** Crăciunaş, C., Chiriac, C.M., Szekeres, E., Coman., C., Butiuc-Keul, A. (2016) Exploring the role of coliform bacteria in class 1 integron carriage and biofilm formation during drinking water treatment. Microbial Ecology 72(4), 773-782
36. Butiuc-Keul, A., **Farkas, A.,** Cristea, V. (2016) Genetic stability assessment of in vitro plants by molecular markers. Studia Universitatis Babes-Bolyai 61(1), 107-114
37. **Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi**

**(neindexate)**

**- Reviste**

**- Selecţie cu maximum 20 lucrări în volume de conferinţe**

1. **Farkas, A.** (2021) Poluarea produsă de antibiotice. EcoDays, 10-20 Mai 2021, online – prezentare.
2. **Farkas, A.,** Butiuc-Keul, A., Crăciunaș, C., Carpa R., Podar, D., Muntean, V., Szoke-Nagy, T., Coman, C. (2017) Tracking antimicrobial resistance in aquatic environments: how much natural and how much anthropogenic? 2nd International Caparica Conference in Antibiotic Resistance, p. 131, 12-15 Iunie 2017, Caparica, Portugalia – prezentare.
3. Butiuc-Keul, A., **Farkas, A.,** Crăciunaș, C., Carpa R., Podar, D., Muntean, V., Szoke-Nagy, T., Coman, C. (2017) Prevalence of aminoglycoside resistance genes in hospital sewage, wastewater and surface waters. 2nd International Caparica Conference in Antibiotic Resistance, p. 277, 12-15 Iunie 2017, Caparica, Portugalia – poster.
4. Ráduly O.C., **Farkas A.** (2016) Rolul bacteriilor denitrificatoare în reducerea nitraților din sursele de apă potabilă. BioTA, 25-26 Martie, Cluj-Napoca – prezentare.
5. Dumitrică DI, **Farkas A.** (2016) Microbial processes in drinking water biofilm causing operational problems. Young Researchers in BioSciences, 25-31 Iulie, Cluj-Napoca – poster.
6. Cruceriu D., Chiriac C., Coman C.,Carpa R., Maior M.C., **Farkas A.**, Rudi K., Podar D., (2016) Diversity and metal resistance assessment of microbial communities within the rhizosphere of plants grown on mercury metalliferous soils, European Society for Soil Conservation (ESSC) Conference - Soil: our common future, p. 28, 15-18 Iulie, Cluj-Napoca – prezentare.
   1. **Brevete obţinute în întreaga activitate**

Nu e cazul.

**Data: Semnătura:**

01.07.2025