




## PERSONAL INFORMATION



## Mădălina Alexandra DAVIDESCU

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## WORK EXPERIENCE

- 02/2022 - present **Assist. prof. PhD**  
Iasi University of Life Sciences  
*Type of business or sector:* Academic-Research & Development
- 09/2021- 02/2022 **Associate assist. prof. PhD**  
Iasi University of Life Sciences  
*Type of business or sector:* Academic-Research & Development
- 10/2018 - 02/2022 **Researcher**  
Research and Development Station for Cattle Breeding, Dancu-Iasi, Romania  
*Type of business or sector:* Research & Development
- 07/2016 - 09/2018 **Research assistant**  
Research and Development Station for Cattle Breeding, Dancu-Iasi, Romania  
*Type of business or sector:* Research & Development

## EDUCATION AND TRAINING

- 2018-2021 **PhD – Doctor in Genetics**  
Iasi University of Life Sciences  
Title of doctoral thesis: „Phylogenetic relationships and genetic diversity of endangered romanian cattle breeds, Grey Steppe and Pinzgau”
- 2019-2021 **MSc – Master of science, Master in Molecular genetics**  
Alexandru Ioan Cuza University of Iași, Romania
- 2019-2020 **Pedagogic studies for higher education, level II**  
University of Agricultural Sciences and Veterinary Medicine, Iasi, Romania
- 2016-2018 **MSc – Master of science, Master in Food Quality and Safety Management**  
University of Agricultural Sciences and Veterinary Medicine, Iasi, Romania
- 2012-2016 **BSc – Bachelor of science, Engineer in Food Quality Control and Expertise**  
University of Agricultural Sciences and Veterinary Medicine, Iasi, Romania
- 2012-2015 **Pedagogic studies for higher education, level I**  
University of Agricultural Sciences and Veterinary Medicine, Iasi, Romania

**PERSONAL SKILLS AND COMPETENCES**

Mother tongue(s)	Romanian		SPEAKING		WRITING
	UNDERSTANDING		Spoken interaction	Spoken production	
Other languages	Listening	Reading			
English	B2	C1	B2	B2	B2
French	B1	B2	B1	B1	B1
Spanish	B1	A2	B1	B1	A2

European level: A1/2: Elementary; B1/2: Independent user; C1/2: Proficient user

Social skills and competences	<ul style="list-style-type: none"> <li>public speaking</li> <li>adapting the message to the audience to which it is delivered during plenary presentations</li> <li>cohesion and clarity of speech</li> <li>integration in different cultural environments and work teams</li> </ul>
Organisational skills and competences	<ul style="list-style-type: none"> <li>skills in organizing work teams and distributing tasks</li> <li>initiative</li> <li>developing research ideas in projects</li> <li>knowledge of statistical analysis programs and interpretation of experimental data (genomic analysis)</li> <li>responsibility</li> </ul>
Other skills and competences	<ul style="list-style-type: none"> <li>perseverance, punctuality, adaptability</li> <li>proper time management, responsibility</li> <li>planning skills</li> <li>motivation in evolution and continuous professional development</li> <li>listening and critical thinking, improvement</li> </ul>

**ADDITIONAL INFORMATION**

**Scientific papers** **Total no.:** 40 scientific papers, 8 scientific papers published in ISI/ISI proceedings journals  
**List of representative scientific papers:**

- Mădălina Alexandra DAVIDESCU**, Bianca Mădescu, Mitică Ciorpac, Lucian Dascălu, Teodor Bugeac, Andrei Matei, Ioana Poroșnicu, Șteofil Creangă, **2021** - *Genetic diversity of Pinzgau cattle breed: A systematic review*. Scientific Papers. Series D. Animal Science, Vol. LXIV, Nr. 2, p. 40-44, Indexată ISI. ISSN 2285-5750. International Conference "Agriculture for Life, Life for Agriculture", USAMV, București, 2021. <https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000737352500003>.
- Madalina Alexandra DAVIDESCU**, Mitică Ciorpac, Șteofil Creanga, **2021** - *Highly effective method of DNA extraction from blood: a first step for analysis of genetic diversity of indigenous cattle breeds*. Scientific Papers. Series D. Animal Science, Vol. LXIV, Nr. 2, p. 35-39, Indexată ISI. ISSN 2285-5750. International Conference "Agriculture for Life, Life for Agriculture", USAMV, București 2021. <https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000737352500002>.
- Mădălina Alexandra DAVIDESCU**, Andrei C. Grădinaru, Constantin Pascal, Daniel Simeanu, Vasile Maciuc, Mihaela Ivancia, Șteofil Creanga, **2021** - *Analysis of the Mitochondrial Genome in Podolian Cattle Breeds*. Scientific Papers Animal Science and Biotechnologies. Vol. 54 (2), pp. 55-59. ISSN 2344 – 4576.

4. **Madalina Alexandra DAVIDESCU**, Mitică Ciorpac, Bianca Maria Mădescu, Ioana Poroșnicu, Șteofil Creangă, **2021** - *Analysis of the Genetic Diversity of Endangered Cattle Breeds Based on Studies of Genetic Markers*. Scientific Papers Animal Science and Biotechnologies Vol. 54 (2), pp. 60-63. ISSN 2344 – 4576.
5. **Madalina Alexandra DAVIDESCU**, Bianca M. Mădescu, Andrei C. Matei, Ioana Poroșnicu, Andra S. Neculai-Văleanu, Mitică Ciorpac, Șteofil Creangă, **2020** - *Genetic Markers Used in Molecular Phylogeny Studies, Research on Endangered Cattle Breeds*. Scientific Papers Animal Science and Biotechnologies, Vol 53 (2), p. 84-87. ISSN 2344 – 4576.
6. **Mădălina Alexandra DAVIDESCU**, C-tin Pascal, A.C. Grădinaru, D. Simeanu, V. Maciuc, Șt. Creangă, **2020** - *Analytical methods based on mass spectrometry used in genomic, proteomic and metabolomic studies*. Scientific Papers-Animal Science Series: Lucrări Științifice - Seria Zootehnie, Vol. 74, p. 10-14. ISSN 2067-2330.
7. **Mădălina Alexandra DAVIDESCU**, Grădinaru C.A., Ilie E. Daniela, Ivancia Mihaela, Creangă Șt., **2020** – *Blood DNA extraction for genetic analysis in endangered Romanian Grey cattle*. Scientific Papers- Animal Science Series: Lucrări Științifice - Seria Zootehnie, Vol. 75, p.119-122. ISSN 2067-2330.
8. **Mădălina Alexandra DAVIDESCU**, Pascal C-tin, Ciorpac M., Mădescu M. Bianca, Neculai-Văleanu A. Sabina, Poroșnicu Ioana, Matei A.C., Creangă Șt., **2020** - *Analysis methods used in genomics research on cattle breeds*. Scientific Papers-Animal Science Series: Lucrări Științifice - Seria Zootehnie, vol. 75, p. 123-127. ISSN 2067-2330.
9. **Madalina Alexandra DAVIDESCU**, Șteofil Creangă, Mădălina Elena Henea, Andrei Cristian Grădinaru, **2020** - *Agriculture and milk production in Romania - retrospectives and trends in the European context*. AAB Bioflux, Vol. 12, Issue 2, p. 58-66. ISSN 2067-6344.
10. **Mădălina Alexandra DAVIDESCU**, Bianca Maria Mădescu, Andrei Cristian MATEI, Șteofil Creangă, **2020** - *Study On the phylogenetic analysis of endangered romanian cattle Breeds: Grey Steppe and Pinzgau*. The 19th International Conference "Life Sciences for Sustainable Development", Book of Abstract, p. 262. ISSN 2392-6937.
11. **Mădălina Alexandra DAVIDESCU**, Andrei C. Grădinaru, Mitică Ciorpac, Mădălina Henea, Șteofil Creangă - *Genetic Markers in the Study of Threatened with Extinction Cattle Breeds*, **2020**. European Biotechnology Congress 2020, Journal homepage Biotechnology & Biotechnological Equipment, Vol. 35. p. 102. I.F. 1.632. WOS: 000622161800001.
12. **Mădălina Alexandra DAVIDESCU**, A.C. Grădinaru, Șt. Creangă, **2020** - *Genetic markers associations in endangered cattle breeds to resistance on environmental conditions*. 5th International Conference on Chemical Engineering. Book of Abstract, p. 76.
13. **Mădălina-Alexandra DAVIDESCU**, Grădinaru A.C., Creangă Șt., **2019** - *Endangered Romanian Cattle Breeds – Between Traditional Breeding and Genetic Conservation*. Scientific Papers-Animal Science Series: Lucrări Științifice - Seria Zootehnie, vol. 75, p. 66-75. ISSN 2067-2330.  
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000747623800057>
14. **Mădălina Alexandra DAVIDESCU**, Mădescu Bianca Maria, Matei A.C., Creangă Șt., **2019** - *The quality indicators of raw milk produced from a cattle farm in Iasi county*. Annals of the University of Craiova, Vol. XXIV (LX), p. 360-366. I.S.S.N 1435-1275.
15. **Mădălina-Alexandra DAVIDESCU**, Șt. Creangă, R.M. Radu-Rusu, **2019** - *Research on Enzymatic Methods Used in the Validation of the Heat Treatment Processes Applied to Sour Cream, Raw Material for Butter*. International Scientific Symposium Bioengineering Of Animal Resources, Usamvbt, 2019. ISSN 2344–4576.

Grants and  
research projects**Total no.: 4****List of research grants and contracts:**

1. Contract AG. EC. NR. 16924/30.09.2021, "Cercetări privind optimizarea alimentației taurinelor pentru carne", Perioada derulare: 2021-2022, USV Iași.
2. Program sectorial ADER 2015-2018, Contract nr. 5.2.2./30.10.2015 (2015-2018), "Conservarea și prezervarea taurinelor pe cale de dispariție, respectiv rasa Sură de stepă în vederea asigurării biodiversității resurselor genetice a populațiilor de animale", Coordonator S.C.D.C.B. Dancu, Partener USAMV Iași;
3. Program sectorial ADER 2015-2018, Contract 5.3.2./03.11.2015 (2015-2018), "Cercetări privind intensivizarea procesului de reproducție la taurine prin biotehnologii de reproductive", Coordonator S.C.D.C.B. Dancu;
4. Program sectorial ADER 2015-2018, Contract ADER nr. 7.2.1./03.11.2015 (2015-2018), "Îmbunătățire a potențialului productiv în fermele de vaci pentru lapte din N-E României prin producerea de embrioni in vitro folosind donatoare de ovocite înalt productive și material seminal (sexat și nesexat) provenit de la tauri testați", Coordonator S.C.D.C.B. Dancu.

## Competences

- Study of the bovine genome
- Analysis of genomic organization in prokaryotic and eukaryotic organisms
- Methods used in molecular genetics studies
- Biotechnological processes in the food industry

## Fields of research

- Molecular genetics
- Genetic diversity
- Phylogeny and molecular phylogeography
- Genetically modified organisms
- Genetic biotechnologies

Membership in  
scientific and  
professional  
organizations

- Romanian Society of Animal Husbandry - SRZ - member since 2021
- Romanian Association of Food Industry Specialists in Education, Research and Production – ASIAR – member since 2021