

Curriculum Vitae

PERSONAL INFORMATION:



Name: Elaheh Rostamzadeh Mahdabi

✉ E_Rostamzadeh@agr.uk.ac.ir

Rostamzade.eli30@yahoo.com

Nationality: Iranian

Gender: Female

Marital Status: Married

EDUCATION:

PhD in Animal Breeding & Genetics, Shahid Bahonar University of Kerman, Iran.

Thesis Title: Detection of Selection Signatures in Chicken Genome using Whole Genome Data Analysis

Supervisors: Professor Masood AsadiFoozi & Professor Ali Esmailzadeh

Advisor: Dr Ahmad Ayatollahi Mehrgardi

MSc in Animal Breeding & Genetics, Shahid Bahonar University of Kerman, Iran.

Thesis Title: Effect of Genotype by Environment Interaction on Growth Traits and IGF-1 Gene Expression in the Breast Tissue of Japanese Quail.

Supervisors and advisor: Professor Masood AsadiFoozi, Professor Ali Esmailzadeh & Dr. Malek Hossein Asadi.

BSc in Animal Science, Shahid Bahonar University of Kerman, Iran.

MASTER’S THESIS ADVISOR:

Shahid Bahonar University of Kerman, Iran

- Advised graduate students on genomic selection signatures research, including:
 - “Identification of Genomic Signatures for Selection Related to Deafness in Three Dog Breeds”
 - “Investigating the Signatures of Selection in Fine and Coarse Wool Sheep Populations”

INTERNATIONAL RESEARCH EXPRIENCE

1-Kunming Institute of Zoology, Chinese Academy of Sciences (Kunming, China) | Shahid Bahonar University (Kerman, Iran)

PhD Researcher (2025 – Present)

“Deciphering molecular mechanisms of the spatial navigation ability of homing pigeon as a biomimetic model”

2-Chinese Academy of Agricultural Sciences (Beijing, China) | Shahid Bahonar University (Kerman, Iran)

Research Associate (2021 – 2024)

"Inferring Population Structure and Phylogenetic Relationships of Iranian Local Chickens for Conservation Strategies"

SKILLS:

- Bioinformatics & Genomics
 - Bioinformatics: Btrim, Trimmomatic, Samtools, Picard, GATK, FastQC, BWA, IGV, VCFtools, Plink, SNPEff, MEGA, SNPhylo, Admixture, PopLDdecay, etc.
 - Selection Signature Analysis: The Fst, hapFLK, FLK, CLR, ROH, and etc.
 - Phylogenetics & Population Genetics: Structure analysis, PCA, IBD/IBS, LD decay.
- Molecular Biology
 - Genomic DNA/RNA extraction, protein extraction, RT-PCR, PCR, Real-time PCR, agarose gel electrophoresis, polyacrylamide gel electrophoresis, etc.
 - Primer Design: Primer3, Gene Runner, OligoAnalyzer, Oligo7.
- Data Analysis & Software
 - Statistical Tools: R, SAS, ASReml.
 - Databases: NCBI, Ensembl, PubMed.
 - General Software: Microsoft Office (Advanced Excel), Adobe Photoshop.

- Languages
 - Persian (Native), English.

AWARDS & HONORS:

- Shahid Mousavi Scheme Award. (National Elite Evaluation Initiative, Iran).
- Top Student (BSc and MSc), Shahid Bahonar University of Kerman.

TEACHING EXPERIENCES:

1-Shahid Bahonar University of Kerman, Iran

Instructor of Specialized Courses

2-Kerman Graduate University of Technology, Iran

Workshop Instructor

- Led specialized training programs, including a hands-on workshop on “Principles of PCR & Real-Time PCR and Data Analysis” (theoretical and practical components).
-

WORK EXPERIENCES:

IZHAR Co. (Pakistan)

R&D Team Manager

- Spearheaded Biotech R&D projects

Gostaran Bazr Attar Co. (Biotechnology Sector)

Chairperson & R&D Manager

- Oversaw strategic planning and innovation initiatives in animal biotechnology.

ACADEMIC SERVICE

- Peer reviewer in specialized articles in scientific journals.
- Active member of scientific and executive committees of "National Conference on Livestock and Poultry Breeding Management", Shahid Bahonar University of Kerman, Iran

PUBLICATIONS:

Published (International articles):

Rostamzadeh Mahdabi, E., Tian R, Tian, J., Asadollahpour, H., Wang, X., Zh, M., Li, M., Dalai, B., Sai, Y., Guo, W., Zhang L., Esmailizadeh, A (2025). Uncovering Genomic Diversity and Signatures of Selection in a New Crossbred Cattle Population. *Scientific Reports*, (Q1).

Rostamzadeh Mahdabi, E., Esmailizadeh, A., Ayatollahi Mehrgardi, A. and Asadi Fozi, M (2021). A genome-wide scan to identify signatures of selection in two Iranian indigenous chicken ecotypes. *Genetics Selection Evolution*, 53(1), pp.1-16. (Q1).

Rostamzadeh Mahdabi, E., Esmailizadeh, A., Han, J., Wang, M-SH (2024). Comparative Analysis of Runs of Homozygosity Islands in Indigenous and Commercial Chickens Revealed Candidate Loci for Disease Resistance and Production Traits. *Veterinary Medicine and Science*, 11(1), pp.1-14. (Q1).

Rostamzadeh Mahdabi, E., Tian, R., Li, Y., Wang, X., Zhao, M., Li, H., Yang, D., Zhang, H., Li, S. and Esmailizadeh, A (2023). Genomic heritability and correlation between carcass traits in Japanese Black cattle evaluated under different ceilings of relatedness among individuals. *Frontiers in Genetics*, 14, p.1053291 (Q2).

Ameri, N.F., Moradian, H., Koshkoiyeh, A.E., Montazeri, M., **Rostamzadeh Madabi, E** and Asadi Fozi, M (2023). Genetic diversity and positive signatures of selection in indigenous cattle breeds of Iran. *Genome*, 67(2), pp.31-42 (Q2).

Published (National articles):

Rostamzadeh Mahdabi E., Esmailizadeh, A (2022). Investigation of structure and genetic diversity of three native chicken ecotypes with common ancestor and commercial lines using whole genome sequencing data, *Modern Genetics Journal*. Nov 10:239-49.

Rostamzadeh Mahdabi E., AsadiFozi, M., Esmailizadeh, A., Ayatollahi, A., & Masoudzadeh, H. (2021). The study of genetic diversity in Khazak native chicken using whole genome sequencing. *Agricultural Biotechnology Journal*, 13(3), 91-106.

Rostamzadeh Mahdabi E., AsadiFouzi, M., Asadi, M. H., & Esmaeilizadeh, A. (2017). Study of the effect of initial weight on IGF-1 gene expression in Japanese quail breast muscle. *Research On Animal Production*, 16(8), 166-171.

Rostamzadeh Mahdabi E., AsadiFouzi, M., Esmaeilizadeh, A., & Asadi, M. H. (2016). Effect of methionine restriction on IGF-1 gene expression in breast muscle of Japanese quail. *Agricultural Biotechnology Journal*, 8(1), 47-60.

Ghafari, F., Esmaeilizadeh, A., AsadiFouzi, M., & Asadi, M. H. **Rostamzadeh Mahdabi E.**, (2024). Genomic scanning of selection signature and key genes associated with the genetic deafness disorder in three dog breeds based on microarray data, *Modern Genetics Journal*. (Accepted)

Conferences:

RostamzadehMahdabi, E., AsadiFozi, M., Esmailizadeh, A., Nakhaei, S. (2013). Study of the effect of dietary methionine content on bone growth in Japanese quail, 2th national Conference on livestock and poultry breeding management, September, Kerman, Iran.

RostamzadehMahdabi, E., AsadiFozi, M., Esmailizadeh, A., Nakhaei, S. (2013). Study of the effect of dietary methionine restriction on body weight of Japanese quail, 2th national Conference on livestock and poultry breeding management, September, Kerman, Iran.

Poster:

Rostamzadeh, E., Mohammadabadi M. M.(2012). The role of technology in the control of genetic diseases of cattle, 1st congress on dairy cattle and milk industry, February, Qomdc.