Curriculum Vitae

1. Personal Information

Name: Maryam Moazzam-Jazi

Tel: +989133014190

E-mail: setareh227@gmail.com

2. Academic Education

2018-Present: Researcher, Cellular and Molecular Endocrine Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

2011-2016: Ph.D., Molecular Genetics, National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran.

Thesis title: Transcriptome study and identification of salt stress-responsive genes in pistachio (*Pistacia vera* L.) using RNA-seq

2006-2009: M.Sc., Biology, University of Tehran, Tehran, Iran.

Thesis title: Study of COP1 protein role in response to drought, salinity and cold stresses in *Arabidopsis thaliana.*

2001-2005: B.Sc., Biology, University of Tabriz, Tabriz, Iran.

3. Awards and Honors

1. Selected as the top graduated student (B.Sc.), University of Tabriz, Iran Ministry of science, Research and Technology, 2004.
2. Ranked 3rd in M.Sc. National University Entrance Exam, Iran Ministry of Science, Research and Technology, 2006.
3. Selected as the top graduated student (M.Sc.), University of Tehran, Iran Ministry of Science, Research and Technology, 2009.
4. Ranked 6rd in Ph.D. National Entrance Exam, Iran Ministry of Science, Research and Technology, 2011.

4. National Patent

An efficient and low-cost kit for extraction of high-quality RNA from different woody plants, registration number: 83046, 2014.

5. Peer Reviewed Journal Publications

1. **Moazzam-Jazi M**. Rajaei S. Seyedi S.M. Isolation of high quality RNA from Pistachio tree (*Pistacia vera* L.) and other woody plants high in secondary metabolites. *Physiology and Molecular Biology of Plants*, 2015, 21(4), 597–603, doi: 10.1007/s12298-015-0319-x.

2. Rajaei S. Seyedi S.M. Raeisi F. Shiran B. **Moazzam-Jazi M**. Effects of soil petroleum contamination on some physiological and molecular properties of plant. *Journal of cellular and biological research*, 2015, 29(2), 181-197.

3. **Moazzam-Jazi, M**., Khorzoghi, E.G., Botanga, C., and Seyedi, S.M. Identification of reference genes for quantitative gene expression studies in a non-model tree Pistachio (*Pistacia vera* L.). *PLoS one*, 2016, 11(6): e0157467. doi: 10.1371/journal.pone.0157467.

4. **Moazzam-Jazi, M.,** Seyedi, S.M., Ebrahimie, E., Mansour Ebrahimi, M., Botanga, C. 2017. A genome-wide transcriptome map of pistachio (*Pistacia vera* L.) provides novel insights into functional genes and marker discovery. *BMC Genomics*, 2017, 18:627, doi: https://doi.org/10.1186/s12864-017-3989-7.

5. Rajaei S. Sabagh Farshi R. **Moazzam-Jazi M.** Seyedi S.M. 2017. Efficient strategies for elimination of phenolic compounds during extraction of DNA from roots of *Pistacia vera L. Agrivita, Journal of Agricultural Science, 2017, 39 (3), 279-287.*

6. **Moazzam-Jazi M**, Ghasemi S, Seyedi SM and Niknam V. COP1 play a prominent role in drought stress tolerance in Arabidopsis and Pea. *Plant Physiology and Biochemistry*, 2018, 130:678-691.

7. Jannesar M, Seyedi SM, **Moazzam-Jazi M**, Niknam V, Ebrahimzadeh, H, Botanga C. A genome-wide identification, characterization and functional analysis of salt-related long non- coding RNAs in non-model plant *Pistacia vera* L. using transcriptome high throughput sequencing. *Scientific Reports*, 2020, 10: 5585.

8. Khayam Nekoui M, **Moazzam-Jazi M**, Mardi M, Kadkhodaei S. Development of SSR markers associated with biosynthesis pathway of steviol glycosides in Stevia through de novo transcriptome assembly. *Modares Journal of Biotechnology*, 2020, 185-191.

9. **Moazzam-Jazi, M**., Najd Hassan Bonab, L., Zahedi, A.S. et al. High genetic burden of type 2 diabetes can promote the high prevalence of disease: a longitudinal cohort study in Iran. *Scientific Reports*, 2020, 10, 14006.

10. Jafarinejad-Farsangi S, **Moazzam-Jazi,** M, Rostamzadeh F, Hadizadeh M. High affinity of host human microRNAs to SARS-CoV-2 genome: An in silico analysis. *Noncoding RNA*

Research, 2020, 5(4): 222–231.

11. **Moazzam-Jazi M***, Lanjanian H*****, Hedayati M, Akbarzadeh M, Guity K, Sedaghati-khayat B, Azizi F, Daneshpour M. SARS-CoV-2 infection susceptibility influenced by *ACE2* genetic polymorphisms: insights from Tehran Cardio-Metabolic Genetic Study. *Scientific Reports,* 2021, 11, 1529, https://doi.org/10.1038/s41598-020-80325-x.

12. Bonab LN, **Moazzam-Jazi M**, Moosavi RS, Fallah MS, Lanjanian H, Masjoudi S, Daneshpour MS. Low HDL concentration in rs2048327-G carriers can predispose men to develop coronary heart disease: Tehran Cardiometabolic genetic study (TCGS). *Gene*, 2021, 778:145485.

13. **Moazzam-Jazi M**, Lanjanian H, Maleknia S, Hedayati M, Daneshpour MS. The interplay between SARS-CoV-2 and human long non-coding RNAs. *Journal of cellular and molecular medicine*, 2021, 25(12), 5823-5827.

14. Lanjanian H, Nematzadeh S, Hosseini S, Torkamanian-Afshar M, Kiani F, **Moazzam-Jazi M**, Aydin N, Masoudi-Nejad A. High-throughput analysis of the interactions between viral proteins and host cell RNAs. *Computers in biology and medicine*, 2021, 1;135:104611.

15. **Moazzam-Jazi M**, Zahedi AS, Akbarzadeh M, Azizi F, Daneshpour MS. Diverse effect of MC4R risk alleles on obesity-related traits over a lifetime: Evidence from a well-designed cohort study. *Gene*, 2022, 10;807:145950.

16. Jafarinejad-Farsangi S, **Moazzam-Jazi M**, Ghale-Noie ZN, Askari N, Karam ZM, Mollazadeh S, Hadizadeh M. Investigation of genes and pathways involved in breast cancer subtypes through gene expression meta-analysis. *Gene*, 2022, 5;821:146328.

17. Lanjanian H, Najd Hassan Bonab L, Akbarzadeh M, **Moazzam-Jazi M**, Zahedi AS, Masjoudi S, Daneshpour MS. Sex, age, and ethnic dependency of lipoprotein variants as the risk factors of ischemic heart disease: a detailed study on the different age-classes and genders in Tehran Cardiometabolic Genetic Study (TCGS). *Biology of sex Differences*, 2022, 13(1):1-0.

18. Sargazi ML, Jafarinejad-Farsangi S, **Moazzam-Jazi M**, Rostamzadeh F, Karam ZM. The crosstalk between long non-coding RNAs and the hedgehog signaling pathway in cancer. *Medical Oncology*, 2022, 39(9):1-5.

19. Najd-Hassan-Bonab, L., Safarpour M., **Moazzam-Jazi M.**, Azizi F., and Daneshpour M. The role of FTO variant rs1421085 in the relationship with obesity: a systematic review and meta-analysis. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 2022, 1-10.

20. **Moazzam-Jazi, M**., Najd-Hassan-Bonab, L., Masjoudi, S., Tohidi, M., Hedayati, M., Azizi, F. and Daneshpour, M.S. Risk of type 2 diabetes and KCNJ11 gene polymorphisms: a nested case–control study and meta-analysis. *Scientific Reports*, 2022, 12(1), 1-13.

21. Daneshpour MS, Akbarzadeh M, Lanjanian H, Sedaghati-khayat B, Guity, K, Masjoudi S, **Moazzam-Jazi M**, Najd Hassan Bonab L, Zahedi AS, et al. Cohort prole update: Tehran

Cardiometabolic Genetic Study, *European Journal of Epidemiology*, 2023, 1-13**.**

6. Books

1. Translation the **Solomon's Biology** book chapter, 8rd Edition from English to Persian, published by Biology Home, Tehran, Iran, 2013.

2. Translation the **Lodish's Molecular Cell Biology** book chapter, 7rd Edition from English to Persian, published by Biology Home, Tehran, Iran, 2013.

3. Writing **Introduction to Bioinformatics and its applications** book, published by Danesh bonyan fanavar, Tehran, Iran, 2018.

4. Writing the chapter of "Circular RNA in rice" in **Bioinformatics in Rice Research** book, Published by Springer, Singapore, 2021.

7. Congress Papers

1. **Moazzam-Jazi M**, Seyedi S.M, Niknam V. COP1 protein has role in drought stress responses in *Arabidopsis thaliana.* The 15th National & third International Biology conference, 2008, Tehran, Iran.

2. Jahanbakhshian Z, Lotfi A, **Moazzam-Jazi M**, Seyedi S.M. The effects of salt and drought on Pistachio orchard. The 17th National and 5th international Biology Conference, 2015, Kerman, Iran.

3. Lotfi A, Jahanbakhshian Z, Ghadirzadeh E, **Moazzam-Jazi M**, Seyedi, S.M. Na^+ distribution alternation: the key mechanism of salt tolerance in Pistachio (*Pistacia vera*). The 4th Iranian Conference of Plant Physiology, 2015, Tehran, Iran.

4. Jafarinejad-Farsangi S, **Moazzam-Jazi M**. Computational prediction of microRNA targets for Myocardial Infarction Associated Transcript (MIAT) long non-coding RNA. The 24th Iranian and 3rd International congress of Physiology and Pharmacology, 2019, Tehran, Iran.

5. Jafarinejad-Farsangi S, **Moazzam-Jazi M**, Hadizadeh M. MicroRNA-29 family has high affinity to SARS-CoV-2 genome: an in silico analysis. 4th International congress on Biomedicine, 2020, Tehran, Iran.

8. Workshop Attendance

1. Workshop on DNA isolation and gel electrophoresis, University of Esfahan, Esfahan, Iran, 2005.

2. Workshop on PCR applications in genetic engineering, University of Esfahan, Esfahan, Iran, 2005

3. Good Laboratory Practice (GLP) Course, NIGEB Institute, Tehran, Iran, 2007.

4. Workshop on RNA-seq data analysis, University of Shahrekord, Shahrekord, Iran, 2013.

5. Workshop on Genomic and Post-Genomic data analysis in Bioinformatics area, NIGEB Institute, Tehran, Iran, 2013.

6. Workshop on scientific paper writing in English, NIGEB Institute, Tehran, Iran, 2013.

7. Workshop on statistical analysis using R, Statistical research and training center, Tehran, Iran, 2014.

8. Workshop on RNA-seq and exome sequencing data analysis, NIGEB Institute, Tehran, Iran, 2015.

9. Data mining and Bioinformatics in molecular biology, University of Esfahan, Esfahan, Iran, 2015.

10. Workshop on Real-time PCR, NIGEB Institute in collaboration with AmpliconCompany, Tehran, Iran, 2016.

11. Workshop on RNA-seq and Chip-seq data analysis, Pasteur Institute in collaboration with Sapienza University of Italy, 2017.

12. Workshop on whole exome sequencing data analysis, Pasteur Institute in collaboration with Sapienza University of Italy, 2017.

9. Invited Lecturer and Teaching

1. Workshop lecturer on Molecular Cloning and Bacterial Transformation, faculty of new Technologies, Shahid Beheshti University, Tehran, Iran, 2011.

2. Workshop lecturer on RNA Extraction & Reverse Transcription PCR Reaction, faculty of new Technologies, Shahid Beheshti University, Tehran, Iran, 2012

3. Teaching of Plant physiology, Payame Noor University, Karaj, Iran, 2011-2012.

4. Workshop lecturer on Next generation sequencing data analysis: RNA-seq and de novo

assembly, NIGEB Institute, Tehran, Iran, 2016.

5. Workshop lecturer on basic bioinformatics, Payame Noor University, Karaj, Iran, 2017.
6. Workshop lecturer on advanced bioinformatics, Payame Noor University, Karaj, Iran, 2017.
7. Workshop lecturer on RNA-seq data analysis, Alborz Universityof Medical Sciences, Karaj, Iran, 2018.
8. Workshop lecturer on RNA-seq data analysis, Genome Fan Company, Tehran, Iran, 2020.

10. Editorial Activities

Reviewer for PLOS ONE, Scientific Reports, …

11. Computer and Bioinformatics Skills

- Competent in using bash, Linux, and R
- Competent in using cloud computing
- Primer design
- Data analysis of high-throughput sequencing data including DNA-seq, RNA-seq, and miRNA-seq
- Gene network and pathway analysis
- Single Cell RNA-seq data analysis
- Genetic association data analysis
- Variant calling and annotation
- Knowledge and the ability to use various bioinformatics databases, APIs, repositories.

12. Laboratory Skills

- Cell and bacterial culture

- PCR and Real-time PCR
- DNA and RNA extraction and quality assessment
- Agarose gel electrophoresis of DNA and RNA
- Protein extraction and polyacrylamide gel electrophoresis
- Enzyme assay
- Spectrophotometry
- Southern and Western blot
- Gene cloning

13. Foreign Language

English: Fluent