

# CURRICULUM VITAE

**Homa Faraji**

**Date of Birth:** 25 June 1989

**Nationality:** Iranian



## Contact Address

**Email:** [Homa.faraji@gmail.com](mailto:Homa.faraji@gmail.com)

**Langueges:** Persian, English [certificated by Ministry of Health Language Exam (MHLE)]

## Academic Background

**2013-2015**                      **Kharazmi University**                      **Supervisor:** Dr. Masoud Mashhadi Akbar Boojar

Master of Science

**Advisor:** Prof. Reza Sheikhnejad

Biochemistry

**Thesis:** In vitro study on antioxidant and antiglycation effects of Allicin and Alliin in organotypic culture of BALB/c mice liver tissue

**2008-2013**                      **Guilan University**                      **Supervisor:** Prof. Reyhaneh Sariri

Bachelor of Science

Marine Biology

## Distinctions and Credentials

**2015**                      First Ranked Graduate Student, Kharazmi University, Tehran, Iran

**2013**                      Acceptance in Student Olympiad in Biology in Nation Level, Iran

**2013-2015**                      Ranked as “the 1<sup>st</sup> position” in city, Scientific elite, Qamsar, Kashan, Iran

**2013** Admitted to Master of Science through Exceptional Talents Admission at Kharazmi University  
Tehran, Iran

**2013** First Ranked Graduate Student, Guilan University, Rasht, Iran

## **Experience**

### Research Experience

**2016-present** **Endocrinology and Metabolism Research Institute of Tehran University of  
Medical Sciences**

Molecular modeling and simulation group

**2013-2015** **Kharazmi University**

Biochemistry Laboratory

**2013-2014** **Kharazmi University**

Botany Laboratory

### Teaching Experience

**2018-2018** **Endocrinology and Metabolism Research Institute of Tehran University of  
Medical Sciences**

Instructor

- Basic Concepts of Molecular Modeling

**2017-2018** **Farzanegan High School (National Organization for Development of Exceptional  
Talents (NODET), Kashan, Iran**

Teacher

- Teaching of "Biology" for High school students preparing for Biology Olympiad

- 2016-2017**                    **Farzanegan Amin High School (National Organization for Development of Exceptional Talents (NODET), Kashan, Iran**
- Teacher
- Teaching of "Biology" for High school students preparing for Biology Olympiad
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- 2016**                            **Behin Kavosh Bitech Research Center, Tehran, Iran**
- Teacher
- Workshop of "Introduction to systems biology"
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- 2014-present**                **Moshaveran Bartar Institute, Tehran, Iran**
- Teacher
- Teaching of "Biology" for university students preparing for Biology Olympiad
  - Teaching of "Biology" for High school students preparing for Biology Olympiad
  - Teaching of "Chemistry" for High school students preparing for chemistry Olympiad
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- 2013-2014**                    **Farzanegan High School (National Organization for Development of Exceptional Talents (NODET), Kashan, Iran**
- Teacher
- Teaching of "Biology" for High school students preparing for Biology Olympiad
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- 2013-2014**                    **Dekhoda, Kashan, Iran**
- Teaching of "Biology" for High school students preparing for Biology Olympiad

## Organization Experience

- 2018**                    **Endocrinology and Metabolism Research Institute of Tehran University of Medical Sciences, Tehran, Iran**
- Member of executive committee of “Introduction to Molecular Modeling” workshops
- 2014**                    **Kharazmi University, Tehran, Iran**
- Member of executive committee of “18<sup>th</sup> National and 6<sup>th</sup> International Congress of Biology in Iran”
- 2011**                    **Shahid Beheshti University, Tehran, Iran**
- Entomology exhibition
- 2011**                    **Kashan Entrepreneurial Company, Kashan, Iran**
- Business plans of production of Gene modified farming products

## Abstracts and Conference Presentations

- **Faraji, Homa.** Ebrahim-Habibi, Azadeh. “An *in silico* structural analysis of pathogenic mutation effects with three dimensional protein modeling of human medium chain acyl-CoA dehydrogenase”, 15<sup>th</sup> Conference on Biophysical Chemistry, 2018, Gorgan, Iran.
- **Faraji, Homa.** Ebrahim-Habibi, Azadeh. “Computational analysis of pathogenic mutation effects on human acyl-CoA dehydrogenase structure and stability”, 7<sup>th</sup> Bioinformatics Conference of Iran, 2018, Tehran, Iran.
- **Faraji, H.** Mashhadi Akbar Boojari, M. Sheikhejad, R. “Study of Allicin and Alliin antiglycation and their antioxidant effects on mouse musculus liver tissue”, 18<sup>th</sup> National and 6<sup>th</sup> International Congress of Biology in Iran, 2014, Tehran, Iran.

- **Faraji, H.** Ezzati, R. Hejazi, A. Zendegan, V. “The collection of expired folic acid from red cross as nutrition on different parameters of wheat”, 18<sup>th</sup> National and 6<sup>th</sup> International Congress of Biology in Iran, 2014, Tehran, Iran.
- Najarpour, N., Divsalar, A., Mashhadi Akbar Boojar, M. **Faraji, H.** “Discussion and analysis of the role of hypoxia in causing glucose intolerance and effect of fish oil on its treatment”, 18<sup>th</sup> National and 6<sup>th</sup> International Congress of Biology in Iran, 2014, Tehran, Iran.
- Najarpour, N., Divsalar, A., Mashhadi Akbar Boojar, M. **Faraji, H.** “Analysis of gold and silver nanoparticles by using plant extracts”, 18<sup>th</sup> National and 6<sup>th</sup> International Congress of Biology in Iran, 2014, Tehran, Iran.
- Ezzati, R. Hejazi, A. Zendegan, V. **Faraji, H.** “Determination effects of expired vitamin B complex on physical and chemical parameters (case study: *Phaseolus vulgaris*)”, 18<sup>th</sup> National and 6<sup>th</sup> International Congress of Biology in Iran, 2014, Tehran, Iran.

### **Training Courses**

- “International Spring School & Conference: Multiscale Simulation of Soft Matter”, *Shiraz University of Technology, 2018, Shiraz, Iran.*
- “Principles and techniques of scientific lectures”, *Endocrinology and Metabolism Research Institute of Tehran University of Medical Sciences, 2018, Tehran, Iran.*
- “Cheminformatics and Drug Discovery”, *Pasteur Institute of Iran, 2016, Tehran, Iran.*
- “Molecular Dynamics Simulation”, *Endocrinology and Metabolism Research Institute of Tehran University of Medical Sciences, 2016, Tehran, Iran.*
- “Comparative Modeling”, *Endocrinology and Metabolism Research Institute of Tehran University of Medical Sciences, 2016, Tehran, Iran.*
- “Docking”, *Endocrinology and Metabolism Research Institute of Tehran University of Medical Sciences, 2016, Tehran, Iran.*

- “Basic Concepts of Molecular Modeling”, *Endocrinology and Metabolism Research Institute of Tehran University of Medical Sciences*, 2016, Tehran, Iran.
- “Cell-culture and Western blot Analysis”, *Kharazmi University*, 2016, Tehran, Iran.
- “Secondary Metabolites Production Via Plant Tissue Culture”, *Kharazmi University*, 2016 Tehran, Iran.
- “Molecular Techniques in Plant natural products biotechnology”, *Kharazmi University*, 2016 Tehran, Iran.
- “Monoclonal anti body”, *Kharazmi University*, 2016 Tehran, Iran.
- “Bioremediation and effect of bio surfactants”, *Kharazmi University*, 2016, Tehran, Iran.
- “SPSS software”, *Kharazmi University*, 2016, Tehran, Iran.
- “Business plan and create a knowledge-based income”. *Tarbiat modares University*, 2015, Tehran, Iran.
- “Basics, Structure and documentation of Quality Management System in Laboratories in Accordance with: ISO/IEC 17025:2005”. *American Global Standards (AGS)*, 2013, Karaj, Iran.
- “Medicinal Plants”. *Technical and Vocational Training Organization*, 2012, Kashan, Iran.
- “Saffron characteristics and how to plant it”. *Technical and Vocational Training Organization*, 2012, Kashan, Iran.
- “Google Sketch up Software”. *Technical and Vocational Training Organization*, 2012, Kashan, Iran.
- “Marketing Management”. *Technical and Vocational Training Organization*, 2012, Kashan, Iran.
- “Advanced Photoshop”. *Training and Research Center for workers*, 2007, Kashan, Iran.

- “Basic Photoshop”. *Training and Research Center for workers*, 2007, Kashan, Iran.

### **Conference attendance**

- “6<sup>th</sup> Iranian Conference on Bioinformatics, *University of Tehran*, 2016, Tehran, Iran.
- “12<sup>th</sup> Royan International Congress on Stem Cell Biology & Technology”, Royan Institute, 2016, Tehran, Iran.
- “The first National Symposium on Genetics and stem cells”. *National Institute of Genetic Engineering and biotechnology*, 2016, Tehran, Iran.
- 18<sup>th</sup> National and 6<sup>th</sup> International Congress of Biology in Iran, *Kharazmi University*, 2014, Tehran, Iran.

### **Special Skills**

#### Computer Software

- YASARA (Yet Another Scientific Artificial Reality Application)
- Swiss PDB Viewer bioinformatics Software
- R and SPSS
- Accounting software
- International Computer Driving License (ICDL)
- Macromedia Flash Software
- Adobe Photoshop
- End note software

### **Technical Knowledge**

- Docking
- Comparative Modeling
- Molecular Dynamics simulation

- High Performance Liquid Chromatography (HPLC) to evaluation of biomarkers
- Ultraviolet–visible spectroscopy
- Cell viability assay
- Gene and Protein BLAST
- Waste water treatment with nanoparticles

### **Research Interests**

- Molecular Modeling
- Systems Biology
- Bioinformatics
- Biological diagnosis of diseases
- Cancer Biology

### **References**

Available upon request.