PERSONAL INFORMATION

- Name: **Shiva Moein**
- Birth Date: November 9, 1988
- Nationality: Iranian
- Marital Status: Married

Contact Information

- Phone: +989134080686 , +98-3136687087
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EDUCATION

- Ph.D. candidate in Molecular Medicine, 2015 - present

  Isfahan University of Medical Sciences (MUI), Faculty of Medicine, Department of Genetics and Molecular Biology, Isfahan, Iran,

- M.Sc. in Human Genetics, 2012-2014

  Isfahan University of Medical Sciences (MUI), Faculty of Medicine, Department of Genetics and Molecular Biology, Isfahan, Iran

  - Thesis title: *"*Time-dependent assessment of Chronic Hypoxia effect on the expression kinetics of fibrotic genes in TGF-β pathway in human kidney-derived cells*"*

- B.Sc. in Genetics, 2007-2011

  Isfahan University, Isfahan, Iran

PUBLICATIONS

- Moradzadeh K, **Moein S**, Nickaeen N, Gheisari Y. Analysis of time-course microarray data: Comparison of common tools. Genomics. 2018.
- Rabieian R, **Moein S**, Khanahmad H, Mortazavi M, Gheisari Y. Transcriptional noise in intact and TGF-beta treated human kidney cells; the importance of time-series designs. Cell biology international. 2018.

- Heidary Z, Ghaisari J, **Moein S**, Naderi M, Gheisari Y. Stochastic Petri Net Modeling of Hypoxia Pathway Predicts a Novel Incoherent Feed-Forward Loop Controlling SDF-1 Expression in Acute Kidney Injury. IEEE transactions on nanobioscience. 2016; 15:19-26.
- **Moein S**, Javanmard SH, Abedi M, Izadpanahi MH, Gheisari Y. Identification of Appropriate Housekeeping Genes for Gene Expression Analysis in Long-term Hypoxia-treated Kidney Cells. Advanced biomedical research. 2017; 6:15.
- Nickaeen N, **Moein S**, Heidary Z, Ghaisari J. Colored petri net modeling of small interfering RNA-mediated messenger RNA degradation. Advanced biomedical research. 2016; 5:100.
- Nickaeen N, Ghaisari J, Gheisari Y, **Moein S**. "*Modeling and controlling TGF-β pathway using standard Petri Nets*." In Electrical Engineering (ICEE), 2015 23rd Iranian Conference on, pp. 38-43. IEEE, 2015.

RESEARCH INTERESTS

- Cellular and Molecular Biology
- Systems Biology
- Role of Multinucleated cells in regeneration
- Role of polyploidy in cancer
- Regenerative Medicine in the kidney
- Role of Hypoxia pathway in Chronic Renal Disease

PROFESSIONAL EXPERIENCES

- Working with Laboratory animals and performing disease models
- Cell culture technics
- Immunocytochemistry and immunohistochemistry
- flow cytometry
- Molecular biology techniques (real time PCR, RNA extraction, cDNA synthesis, …)
- Bioinformatics:
  - Systems biology (network construction and analysis, Cytoscape software, ...)
  - Analyzing next generation sequencing data in Linux environment
  - Analyzing microarray data by R software-related packages
  - Working with pathway databases, high-throughput databases such as Gene Expression Omnibus (GEO), protein-protein interaction databases
  - Systems thinking and concept mapping

HONORS AND AWARDS

- Ranked 1st for GPA among Human Genetics students-2013 in Isfahan University of Medical Sciences
- Ranked 4 in the national Ph.D university entrance exam held by Iran's ministry of health 2014
- Ranked 3 in the national Msc university entrance exam held by Iran's ministry of Scinece 2012
- Ranked 7 in the national university entrance exam held by Iran's ministry of health 2012
- Ranked 1021 among more than 319,000 participants in the National Undergraduate University Entrance Exam of Iran, 2007

ACADEMIC EXPERIENCES

- Teaching Systems thinking and concept mapping in the tenth science Olympiad of Isfahan university of medical sciences-2018
- Teaching Cell signaling in the sixth science Olympiad of Isfahan university of medical sciences-2014
- Teaching and assistance in Bioinformatics courses for MSc and PhD Students, Isfahan University of Medical Sciences-2014-2018
- Teaching and assistance in Systems biology course for PhD Students, Isfahan University of Medical Sciences-2015-2016
- Teaching and assistance in Systems biology workshop, Regenerative Medicine Lab, Kidney Diseases Research Center, Isfahan University of Medical Sciences-2014
- Assistance in course of Biomedical Science for medical students- 2015-217
- Worked as laboratory assistant in Transfection workshop, Isfahan University of medical sciences, 2014
- Worked as laboratory assistant in Transfection workshop, Isfahan University of medical sciences, 2015

RESEARCH PROJECTS

- Regenerative potential of multinucleated cells in bone-marrow
- Role of polyploid tissue resident macrophages in the kidney
- Mathematical modeling of macrophage fate-determination
- Mathematical modeling of TGFβ pathway in promoting Chronic Renal Failure
- Assessment of the gene expression pattern of Olfactory Receptors in mouse model of unilateral urothelial obstruction in a systems biology approach

- Assessment of capability of different tools in analyzing time-course microarray data
- Assessment of crosstalk of hypoxia and TGFβ pathway in in vitro model of Chronic Kidney Disease

Participation in Workshops

- Systems Biology workshop, Pasteur Institute of Iran, 2014.
- R Software workshop, Pasteur Institute of Iran, 2015.
- Mathematical Modeling workshop, Pasteur Institute of Iran, 2016.
- Summer School of Critical Thinking, National Elites Foundation of Isfahan, 2014
- Genetic engineering workshop, University of Isfahan, 2013

Congress Presentation

- Kobra Moradzadeh, **Shiva Moein**, Niloofar Nickaeen, Yousof Gheisari, Comparison of microarray time-course analysis tools, The 3rd Iranian Conference on Systems Biology. Awarded as the second best poster
- **Shiva Moein**, Kobra Moradzadeh, Niloofar Nikaeen, Yousof Gheisari, A Holistic View to polarization of kupffer cells by Lipopolysaccharide and IL-4, The 3rd Iranian Conference on Systems Biology

Research Assistant

- Research Assistant in Regenerative Medicine Lab, Isfahan Kidney Diseases Research Center, Isfahan University of Medical Sciences, 2014-present.
  http://rml.mui.ac.ir/

- Yousof Ghaisari, MD, Ph.D. (Supervisor), Associate professor, genetics and molecular biology department, faculty

Referees

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- Naser Ahmadbeigi, Ph.D. Assistant professor, Tehran University of Medical Sciences,Digestive Disease Research Center, phone: +98-9125274376. ahmadbeigi28@gmail.com

- Shaghayegh Haghjooy Javanmard, MD, Ph.D. (Supervisor of Msc thesis), Associate professor, department of physiology, faculty of medicine, Isfahan university of medical sciences, Phone: +98-3137922295, sh_haghjoo@ med.mui.ac.ir