

Curriculum vitae



Personal Information

First name: Arvin

Surname: Haghigatfard

Place of Birth: Tehran, Iran

Date of birth: 12 Oct 1991

Marital status: single

Citizenship: Iranian

Language: Persian, Arabic (to some extend), English (fluent)

Present Position:

1) Head of department of bioinformatics and genetic engineering of young *researchers and elites* club

2) Lecturer at department of Genetics, Tehran medical sciences branch, Islamic Azad University, Tehran, Iran

Current Address: department of Genetics, Tehran medical sciences branch, Islamic Azad University, Tehran, Iran

Cell phone: +98-935-5127310

E-mail: arvinland@yahoo.com , a.haghigatfard@iautnb.ac.ir, newarvinland@gmail.com

Research's interests: behavioral genetic, genetic of schizophrenia, genetic of psychiatric disorders, complex multifactor disorders, genetic of human evolution, bioethics researches specially with historical approach, genetic counseling

Other interests: playing piano & guitar , writing short stories

Education:

PhD: Genetics, department of biology, Islamic Azad University, Tehran North Branch, 2019

PhD thesis: **Gene expression profiling of Iranian patients with schizophrenia, type A personality disorders and Methamphetamine induced psychosis**

M.Sc: Genetics, department of biology, Islamic Azad University, Sciences & Research Branch, 2014

M.Sc thesis: **expression analysis of *NDUFS1* gene in Iranian schizophrenic patients** (passed by A++ grade)

B.Sc: Microbiology, department of microbiology, Faculty of Basic Sciences, Islamic Azad University, North Tehran Branch, 2008

English language exam

Iran's Ministry of Health language exam (MHLE), Sep 2014/result score: 59 from 100

Certification code: R38518R51464T24

English Proficiency test of Islamic Azad University, Sep 2017/results score: 700 from 1000

Honored and awards:

- Graduation from high school at age 12 as youngest high school graduated of Iran at 2003
- Attending to university in B.Sc at age 12 after passing the entrance exam as youngest student of Iran universities at 2003
- Attending to university in M.Sc at age 19 after passing the entrance exam as youngest graduate student of Iran universities at 2012
- Attending to university in PhD at age 24 after passing the comparative entrance exam in 2015
- Youngest "special talents "member of *young researchers and elites club*
- Top researcher of *young researchers and elite club*-Tehran branch,2014
- EZAMA bronze award in addiction science, third year of EZAMA award, Tehran, Iran, September 2014 (for research entitled: **Gene expression and psychiatric analysis of 50 Iranian methamphetamine addicted individuals**) selected from 700 articles.
<http://www.ezama.org/index.php/fa/titles-of-37-selected-articles-among-the-total-700-submitted-articles-fa>
- EZAMA silver award in addiction science, fifth year of EZAMA award, Tehran, Iran, September 2016 (for research entitled: **Genome-wide microRNA expression profiling of methamphetamine dependence patients showed novel biomarker**) selected from 550 articles.
<http://www.ezama.org/index.php/en/en-home/45-en-main-contents/ezama-archive/ezama2016/97-announcement-of-awardees-of-the-fifth-ezama-award-en-c>
- Best poster presentation in 2th international conference of bioethics, national research institute of biotechnology and genetic engineering of Iran ,Tehran, Iran, 2011
- Best poster presentation in 1th national conference of cellular and molecular conference, Islamic Azad university ,Parand branch ,Tehran, Iran, 2012
- Best poster presentation in 7th annual conference of neurogenetic society of Iran ,Yazd ,Iran, 2014

- "Faran Shimi co. " Award for best poster presentation in 9th international congress on addiction science, Tehran, Iran, Sep 2015
- Best oral presentation in 6th basic and clinical neuroscience conference, Tehran, Iran, 2017

Publications:

- 1) Haghghatfard, A. *, Andalib, S., Amini Faskhodi, M., Sadeghi, S., Ghaderi, A. H., Moradkhani, S., ... & Ghadimi, Z. (2017). **Gene expression study of mitochondrial complex I in schizophrenia and paranoid personality disorder.** *The World Journal of Biological Psychiatry*, 1-14. DOI:10.1080/15622975.2017.1282171/ **impact factor: 4.2**
- 2) Haghghatfard A, Hosseini Z, Mahmoodi A, Mahmoodi A, Qazvini MG, et al. (2016) **NRG1 Types Down Regulate in Methamphetamine and Heroin Dependent Patients.** *MOJ Addict Med Ther* 3(2): 00030. DOI: 10.15406/mojamt.2017.03.00030/ **impact factor: 1.2**
- 3) Jalal Rostampour, Arvin Haghghatfard*, Masoume Ghasemzadeh Qazvini, Talie Karimi, Elham Rastegarimoghaddam, Atieh Alizadenik, Zahrasadat Hosseini, (2017) **Expression alteration of disrupted in schizophrenia 1 (DISC1) gene, a potential peripheral marker for schizophrenia and paranoid personality disorder,** *Hereditary Genet* 6: 188. doi:10.4172/2161-1041.1000188/ **impact factor: 1.2**
- 4) Esfandiar Azad, Arvin Haghghatfard, Alireza Mohammadi, (2018) **Low resilience to stress is associated with candidate gene expression alterations in the dopaminergic signaling pathway,** *psychogeriatrics* / **impact factor: 1.52**
- 5) Tayebe Talebzade, Fahimeh Baghbani-arani, Soha Sadeghi, Arvin Haghghatfard*, Niloofar Ahmadi, Massoud Houshmand, Ali Dezhgir, (2017) **Immunotherapy of Prostate Cancer Patients could Overexpress The Virulence Factor Genes of E.faecalis,** *Edelweiss Cancer Open Access journal*1: 11-14 **Impact factor: 1.2**
- 6) Soha Sadeghi, Tayebe Talebzade, Sahel Tofigh Rafiei, Donya Altafi, Hamed Hojatiyan, Shabnam Naderifar, Niloofar Ahmadi, Ali Dezhgir, Arvin Haghghatfard*, (2018). **Immunotherapy of prostate Cancer may change mrna level of virulence factor genes in E.Faecalis of micro flora,** *J. Inf. Mol. Biol.* 6(1): 1-6. **Impact factor: 2.2**
- 7) Amir Hossein Ghaderi, Shadi Moradkhani, Arvin Haghghatfard, Fatemeh Akrami, Zahra Khayer, Fuat Balci, (2018) **Time estimation and beta segregation: An EEG study and graph theoretical approach.** *PLoS ONE* 13(4):e0195380. <https://doi.org/10.1371/journal.pone.0195380> **impact factor: 2.8**
- 8) Samane Abbasy, Fazlollah Shahraki, Arvin Haghghatfard*, Masoume Ghasemzadeh Qazvini, Sahel Towfigh Rafiei, Elnaz Noshadirad, Mahdi Farhadi et al. **"Neuregulin1 types mRNA level changes in autism spectrum disorder, and is associated with deficit in executive functions."** *EBioMedicine* 37 (2018): 483-488. **Impact factor: 6.7**

Under review articles:

- 1) First genome wide association study of Internet addiction: strong shared genetic risk factors with psychosis**
- 2) Detection of six novel de novo mutations in individuals with low resilience to psychological stress**
- 4) Gene expression profiling of suicide victims with psychosis by using DNA microarray**
- 5) Biomarkers identified for methamphetamine induced psychosis in whole genome expression profiling study**
- 6) Frequency of polymorphisms of thiopurine S-methyl transferase gene in Iranian Alopecia areata patients, a case-control study**

Conferences Presentations:

Oral:

- 1. Using of I.V.F fetus as a source of stem cell in bioethics issues , conference of artificial fetus, ethics, law and Islamic rules, Royan Institute, Tehran , Iran,2011**
- 2. Screening, prevention and diagnosis of schizophrenia by molecular biomarkers ,6th annual conference of neurogenic society of Iran, Kerman , Iran,2013**
- 3. Public education and Genetic counseling roles in decreasing abortion rate ,3th conference of medical ethic, Tehran university of medical science,Tehran,Iran,2013**
- 4. Serotonin effects on NDUFS1 gene expression, a schizophrenia animal model research, 7th annual conference of neurogenic society of Iran, Yazd, Iran,2014**
- 5. Over expression of NDUFS1 and NDUFS2 in methamphetamine addicted individuals,1th international & 13th national congress of Iranian society of genetic,Tehran,Iran,2014**
- 6. Gene expression and psychiatric analysis of 50 Iranian methamphetamine addicted individuals , 8th international congress on addiction science, Tehran, Iran,2014, Archives of Iranian Medicine, Vol. 17, No. 01, September 2014**
- 7. Expression analysis of COMT gene in 22q11.2 deletion syndrome patients with schizophrenia, 8th annual conference of neurogenic society of Iran, Ahvaz, Iran,2015**
- 8. Gene expression profiling of 70 suicide victims with psychosis by using DNA microarray, 12th World congress of Biological Psychiatry, , Athens, Greece,14 – 18 june 2015**
- 9. Genetic bases of Internet addiction revealed in genotyping study, 9th international congress on addiction science, Tehran, Iran,2015**
- 10. Neuroimaging genetic study revealed novel findings in Pathophysiology of Internet addiction,4th basic and clinical neuroscience conference,Tehran,Iran,2015**

11. **Gene expression alteration in suicide victims with psychosis**, The 1st International & 9th National Iranian Neurogenetics Congress, Tehran,Iran, 2–4 March 2016, Genetics in the 3rd Millennium,vol.13,no.4, winter 2016
12. **Gene expression profiling of Internet addicted persons detected shared candidate genes with neuropsychiatric disorders**, 2th international & 14th national congress of Iranian society of genetic,Tehran,Iran,2016
13. **Down expression of NRG1 types I, II and III in Iranian schizophrenic patients** , The 1st International & 9th National Iranian Neurogenetics Congress, Tehran, Iran, 2–4 March 2016, Genetics in the 3rd Millennium,vol.13,no.4, winter 2016
14. **Genome-wide microRNA expression profiling of methamphetamine dependence patients showed novel biomarker**, 10th international congress on addiction science, Tehran, Iran,2016
15. **NRG1 types down regulate in methamphetamine dependent and schizophrenic patients**, 10th international congress on addiction science, Tehran, Iran,2016
16. **Genetic risk factors of idiopathic nightmare disorder revealed in a genome wide association study**, 5th basic and clinical neuroscience conference,Tehran,Iran,2016
17. **Genetic risk factors for tendency to suicide detected in a GWAS study**, 1th International congress of personalized medicine, Tehran,Iran,2017
18. **Several novel biomarkers in bioenergetic pathways have detected in schizophrenia and paranoid personality disorder**, 1th International congress of personalized medicine, Tehran,Iran,2017
19. **Expression level study of EGR family genes in schizophrenic patients**, 1th International congress of personalized medicine, Tehran,Iran,2017
20. **Data mining analysis of genetic variation and environmental properties predict susceptibility to addiction; analysis by using r language**, 11th international congress on addiction science, Tehran, Iran,2017
21. **First genome wide association study of Internet addiction; revealed strong shared risk factors with psychosis**, 2017 annual meeting of American society of human genetic,Orlando,USA,2017
22. **Epigenetic, gene expression profiling and neuroimaging features could predict the methamphetamine induced psychosis**, 6th basic and clinical neuroscience conference,Tehran,Iran,2017
23. **NRG1 expression changes in Autism spectrum disorder and play role in executive functions abnormalities**, 1th international biomedicine conference, Milad tower conference center, Tehran,Iran,2017

Poster:

1. **Agricultural Transgenic products and new economic, ecological regulation of the world**, 2th international conference of bioethics, national research institute of biotechnology and genetic engineering of Iran, Tehran ,Iran, 2011
2. **Developing of diagnosis method of schizophrenia by using molecular markers**,1th national conference of cellular and molecular conference, Islamic Azad university ,Parand branch,Tehran,Iran, 2012

3. **Genetic counseling role in historicist middle east cultures**, 45th annual meeting of european society of human genetic, Norenbeg, Germany, 3-6. Jul. 2012
4. **Genetic counseling future in historicist middle east cultures** , 2012 annual meeting of American society of human genetic,Sanferancisco,USA,2012
5. **Pharmacogenetic studies and ortomolecular treatments , new ways of treatment in psychotic diseases** ,6th anual conference of neurogenetic society of Iran,Kerman,Iran,2013
6. **Functional polymorphisms affected on antipsychotic responses in Bipolar patients** ,6th anual conference of neurogenetic society of Iran,Kerman,Iran,2013
7. **Public education and undirected Genetic counseling roles in decreasing abortion rate**, 2th conference of ethic and fertilization rights , Royan institute,Tehran,Iran,2013
8. **Study of antimicrobial effects of narcissus jonquilla essence on common gram positive and negative bacterias (E.coli , B.cereus, S.aureus)** , 2th national congress on medicinal plants ,Shahid Beheshti university,Tehran,Iran,2013
9. **Expression analyses of NDUFS1 in Iranian schizophrenic patients**, 3th conference of medical genetic, Tehran university of medical science ,Shariati Hospital,Tehran,Iran,2013
10. **Expression analyses of NDUFS1 in Iranian schizophrenic patients**, 7th annual conference of neurogenetic society of Iran, Yazd, Iran,2014
11. **Expression analyses of NDUFS1 in 100 Iranian paranoid schizophrenic patients**,1th international & 13th national congress of Iranian society of genetic,Tehran,Iran,2014
12. **Genetic variations associated with tendency to methamphetamine abuse; a review study**, 8th international congress on addiction science, Tehran, Iran,2014
13. **Gene expression analysis of methamphetamine addicted and schizophrenic patients in correlation with their psychiatric symptoms**, annual American society of human genetic conference, SANDIEGO,USA, 2014
14. **Gene expression and psychiatric study in 100 Iranian schizophrenic patients**,3th basic and clinical neuroscience conference,Tehran,Iran,2014
15. **Technical resolution impacts and Applications of nanotechnology in food and food processing** , 2th National Conference on Food Science and Technology,Ghochan,Iran,2013
16. **Using phasic logic to recognize the border of eugenic of human and prevention of genetic disease** ,3th conference of medical ethic, Tehran university of medical science,Tehran,Iran,2013
17. **Shared risk genes of autism and ADHD**,8th annual conference of neurogenetic society of Iran, Ahvaz, Iran,2015
18. **NRG1 role in neuropsychiatric disorders**, 8th annual conference of neurogenetic society of Iran, Ahvaz, Iran,2015
19. **Abnormal Expression of Mitochondrial Complex I Genes in Iranian schizophrenic patients**,8th annual conference of neurogenetic society of Iran, Ahvaz, Iran,2015

20. **Gene expression and psychiatric analysis of 100 Iranian methamphetamine addicted individuals**, 12th World Congress of Biological Psychiatry, Athens, Greece,14 - 18 June 2015
21. **The effects of valeriana officinalis extract, valeric acid and valproate in rat model of schizophrenia**, 2th national congress on medicinal plants ,Iran university of medical science,Tehran,Iran,2015
22. **Genotyping study detected genetic bases of Methamphetamine abuse tendency**, 9th international congress on addiction science, Tehran, Iran, Sep 2015
23. **Gene expression study of mitochondrial complex I revealed novel candidate genes in schizophrenia and Paranoid Personality Disorder**, 5th biennial meeting schizophrenia International research society conference, Florence, Italy,2016
24. **BDNF expression level altered in opium addicts after methadone maintenance treatment**, 10th international congress on addiction science, Tehran, Iran,2016
25. **NRG1 expression study in Paranoid personality disorder**, 5th basic and clinical neuroscience conference,Tehran,Iran,2016
26. **Expression level analysis of DRD4 in patients with Attention deficit hyperactivity disorder**, 5th basic and clinical neuroscience conference,Tehran,Iran,2016
27. **Expression level analysis of NRG1 in patients with Autism spectrum disorder**,5th basic and clinical neuroscience conference,Tehran,Iran,2016
28. **Genetic variants in dopaminergic pathway were associated with ADHD in Iranian population**, 1th International congress of personalized medicine, Tehran,Iran,2017
29. **Genotyping and expression study of NRG1 in schizophrenic patients have presented biomarkers for negative symptoms**, 1th International congress of personalized medicine, Tehran,Iran,2017
30. **Over expression of MMP9 gene in peripheral blood of schizophrenic patients**, 1th International congress of personalized medicine, Tehran,Iran,2017
31. **Abnormal epigenetic and gene expression profile detected in children with meth dependent mothers**, 11th international congress on addiction science, Tehran, Iran,2017
32. **Epigenetic and neuroimaging features could predict the meth induced psychosis; a genome wide methylation study**, 11th international congress on addiction science, Tehran, Iran,2017
33. **Expression level study of EGR family genes in schizophrenic patients**, 2017 annual meeting of American society of human genetic,Orlando,USA,2017
34. **Low resilience to stress are associated with candidate gene expression alterations in the dopaminergic signaling pathway**, 6th basic and clinical neuroscience conference,Tehran,Iran,2017
35. **Noise pollution may induces depressive like behaviors and deficiency on executive functions**, 6th basic and clinical neuroscience conference,Tehran,Iran,2017
36. **Genetic variants in memory and learning genes are associated with over estimation of time**, 6th basic and clinical neuroscience conference,Tehran,Iran,2017

Published in abstract book:

1. **SEROTONIN EFFECTS ON *NDUFS2* GENE EXPRESSION, A SCHIZOPHRENIA ANIMAL MODEL**, 47th ANNUAL EUROPEAN SOCIETY OF HUMAN GENETIC CONFERENCE, Milan, Italy, 2014

Workshops attended:

- **Principles of Nanotechnology**, 16 hours education, with completion exam, at Shahid Chamran nanotechnology research center, Tehran, Iran, 2009
- **Workshop of " Neuroimaging findings about Methamphetamine abstained subjects "** ,2 hours, Iran drug control headquarters Tehran, Iran, 2016

Teaching experience:

- Two years of working as lecturer in department of Genetics, Tehran medical sciences branch, Islamic Azad University, Tehran, Iran for theory and experimental courses of genetics and evaluation
- **Nanotechnology applications (biology-medicine and engineering) workshop**, operated by ARKZAKARIA co, as scientific director, June 2012
- **R software workshop**, operated by university of Tehran, as scientific director, March 2017
- **Primer and probe design**, operated by young *researchers and elites* club, June 2018

Laboratory, clinical and computer skills:

- **DNA extraction**
- **RNA extraction**
- **cDNA synthesis**
- **PCR**
- **Real Time PCR**
- **Gel electrophoresis**
- **MTT assay**
- **DNA microarray analyses**
- **NGS ,SNP array and CGH array data analysis**
- **Primer and probe design online and by software (oligo7, generunner)**
- **R software**
- **Finch software**
- **Phred version (0.020425.c)**

- **Sequencher 5.4**
- **Mega5**
- **INGENUITY PATHWAYS ANALYSIS (IPA)**
- **MeV 4.9**
- **Lin reg PCR**
- **ICDL**
- **SPSS**
- **MAT LAB**
- **Python**
- **Fluency to neuroimaging techniques including Electroencephalography and event related potential tests**
- **Fluency to psychological and psychiatric tests(PANSS,BPRS, Wechsler III, Stroop test, Wisconsin Sorting Test , Hamilton tests , Conner Davidson stress resilience test, etc)**