

## *Curriculum Vitae*

### ***SHAHLA MOHAMAD GANJI, PhD. Particulars:***

#### **Personal Data:**

**Name:** Shahla Mohammad Ganji  
**Date of Birth:** 22.05.1970  
**Place of Birth:** Tehran, Iran  
**Gender:** Female  
**Nationality:** Iranian  
**Marital status:** Single

#### **Location:**

**Permanent address:** No.245, 14 Metri Lashgar St., West Golbarg Ave., Tehran, Iran  
**Tel No. (home):** 0098-21-88 41 49 59  
**Cell phone:** 0098-912 621 93 23  
**E-mails:** [shahlamg@yahoo.com](mailto:shahlamg@yahoo.com) ,  
[shahla@nigeb.ac.ir](mailto:shahla@nigeb.ac.ir) ,  
[mhmslh@unife.it](mailto:mhmslh@unife.it)

#### **Education:**

PhD, 2006-2010, Molecular Genetics, Department of Biochemistry, NIGEB, Tehran, Iran

**Thesis title:** *Analysis of multiple Genetic and biochemical markers in patients with Esophageal Squamous Cell Carcinoma and evaluation their applicability in prognosis*

M.Sc., 1998- 2001, Genetics, Department of Biology, Faculty of Science, Researches and Sciences Campus, Islamic Azad University, Tehran, Iran.

**Thesis title:** *Molecular diagnosis of Down syndrome and detection of parental origin*

B.Sc., 1992-1997, Microbiology Science, Department of Biology, Faculty of Science, North of Tehran Campus, Islamic Azad University, Tehran, Iran.

#### **Fellowship and assistantship**

\* 2009 (Jan- July): University of Ferrara, Italy

#### **Awards and Honors**

\* Scholarship award for a 6 months sabbatical period (Ph.D) in Molecular Genetics from IDB to study in the field of molecular genetics, Department of Experimental and Diagnostic Medicine and Interdepartmental Center for Research on Cancer, Ferrara University, Ferrara, Italy

\* Member of the Iranian Biotechnology Society

### **Employment:**

1. Research Assistant and Research Instructor at National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (Since 1998-2006)
2. Faculty member at Islamic Azad University. (Jan 2000-Sep 2006)
3. Genetic counselor for Genetic disease in RP center, Tehran, Iran. (July 2002-Jan 2005)
4. Research Assistant in Genetic Group, Cell Biology Molecular Group, Department of Biology, Faculty of Science, Islamic Azad University, Tehran, Iran. (1995 – 1997)
5. Research Assistant in Reference Central Lab; Boo Ali Hospital, Tehran, Iran. (1991- 1995)

### **Teaching Experiences:**

#### ***(University course)***

Professor assistant and instructor at Islamic Azad University in the following courses:

**(1995-1997)**, Instructing Genetics II Laboratory and I Technologies to students of Biology.

**(2001- 2006)**, Instructing Genetics I (The principle of Genetics), Genetics II (Molecular Genetics and Genetic engineering) courses to students of Biology and Medical Genetics course to students of Medicine (MD)

And,

**(2001, Apr-Sep)**, Teaching and instructing Advance Molecular Genetic Laboratory Technologies to students of Biology in Teacher Training University, Tehran, Iran.

### **Laboratory Skills:**

Cell Culture; Cytogenetic Tests (Karyotyping);

Haplotype and Genotyping Analysis; Mutation and Microsatellite Analysis;

All kind of amplifications based on PCR; Real Time PCR; MicroRNA Assay.

Extraction of all of biology materials; DNA, RNA, Pr, ...

Electrophoresis experiments and Isoelectro focusing (IEF);

Blotting and ELISA; Cloning and Transformation; Chromatography experiments;

Serology Tests; Serum Biochemical Tests.

### **Computer Skills**

\* Various internet-based searches and using databases.

\* Analysis of sequence data, and Bioinformatics with several computers soft wares such as *DNA STAR Package* and *Oligo, PTP (Primer to Primer)*,...

- \* Using some windows programs including *Word, Power point, Excel, Photoshop and SPSS*.
- \* Design and analysis of pedigree with computer soft wares as *Cyrillic 210, 2.1B and 1.1*.
- \* Analysis of data of PAGE Gels by *Laser Densitometer* software.
- \* Analysis of data by *UVIDOC* software.
- \* Analysis of data by *Linkage analysis* software.

### **Languages**

- \* Farsi (Mother language)
- \* English (fluently)

### **I have been involved in the following research projects so far**

- \* Hypermethylation inactivation of tumor suppressor genes in esophageal cancer
- \* Investigation of effect Dermatoglyphics in Iranian patients with Diabetes
- \* Detection of mutation in G6PD gene in northern parts of Iran
- \* Molecular identification the most prevalent mutations of G6PD gene in deficient patients in all states of Iran.
- \* Molecular genetics of RP (Retinitis Pigmentosa) in Iranian patients
- \* Molecular diagnosis of Down syndrome in Iranian Population

### **Publications**

1. **Shahla Mohammad Ganji**, Ferdous Rastgar-Jazii, Mansour Yazdanbod, S.A. Mesbah-Namin. Investigation of methylation of some CKDs in Squamous Cell Carcinoma of Esophagus (SCCE) in Iranian patients. Accepted for published in the **BMC Cancer**.2011. **IF=2.74**
2. **Shahla Mohammad Ganji**, Ferdous Rastgar-Jazii, Abbas Sahebghadam-Lotfi, Mansour Yazdanbod, Ali Mota, Afshin Mohsenifar The Correlation of Phenotype and Genotypes of Alpha-1 Antitrypsin (AAT) with Squamous Cell Carcinoma of Esophagus (SCCE). **LabMedicine J.** Oct. 2010, Vol 41. N. 10: 613-618. [www.labmedicine.com](http://www.labmedicine.com). **IF:1.08**
3. **Shahla Mohammad Ganji**, Elena Miotto, Elisa Callegari, Forouzandeh Fereidooni, Mansour Yazdanbod, Ferdous Rastgar-Jazii, Massimo Negrini. Associations of risk factors obesity and occupational airborne exposures with CDKN2A/p16 aberrant DNA methylation in esophageal cancer patients. **Disease of Esophagus Journal**, April 2010. Vol. 3. Issue 7. DOI: 10.1111/j.1442-2050.2010.01059.x. **IF=1.493**
4. Mojtaba Sohrabi, **Shahla Mohammad Ganji**, Naser Kalhor, Amir Rezagholizade, Mahmud Reza Khazaei, Roya Hoseini. The study of finger prints in diabetic people in Iran. Accepted for published in **The Quarterly Journal of Biological Sciences**, Islamic Azad University – Zanjan, 2010. **Index in ISC**
5. M. Noori-Dalooi, Z. Hajebrahimi, A. mesbah Namin, **S. Mohammad Ganji**, M.H. Sanati. A comprehensive study on the major mutations in glucose-6-phosphate

dehydrogenase - deficient polymorphic variants identified in the Coastal provinces of Caspian Sea in North of Iran. **Clinical Biochemistry**. June 2007, Vol. 40, Issue 9-10: 699-704. Available online at [www.sciencedirect.com](http://www.sciencedirect.com). **IF=2.34**

6. M.R. Noori-Dalooi , S. Soltanian, **S. Mohammad Ganji**, A. Yousefi , and M.H. Sanati. Molecular Identification of the Most Prevalent Mutations of Glucose-6-Posphate Dehydrogenase (G6PD) Gene in Deficient Patients in Khorasan Province of Iran. **J. Sci. I. R. Iran** Autumn 2006,17(2): 103-106. **IF=0.022**

7. M.R. Noori-Dalooi,, S.H. Hejazi, A. Yousefi, **S. Mohammad Ganji**, and M.H. Sanati. Identification of Mutations in G6PD Gene in Patients in Hormozgan Province of Iran. **J. Sci. I. R. Iran** Autumn 2006,17(4): 313-316. **IF=0.022**

8. M.R. Noori-Dalooi, A. Yousefi, S. Mohammad Ganji, S.H. Hejazi, and M.H. Sanati. Molecular Identification of the Most Prevalent Mutation of Glucose-6-Phosphate Dehydrogenase Gene in Deficient Patients in Sistan and Balochestan Province of Iran. **J. Sci. I. R. Iran** Autumn 2005,16(4): 321-325. **IF=0.022**

9. M. Noori-Dalooi, L. Najafi, **S. Mohammad Ganji**, Z. Hajebrahimi, and M. Sanati. Molecular identification of mutations in Glucose -6- Phosphate Dehydrogenase gene in patients with Favism in Golestan state in North of Iran. **Journal of Physiology and Biochemistry**, December 2004, 60(4): 273-278. **IF=1.172**

10. Aleyasin, M. Gazanfari, **S. Mohammad Ganji**, F. Jahanshad. Application of DNA molecular markers (STRs) in diagnosis and etiology of Down syndromes in Iran. **J. Sci. I. R. Iran** Spring 2004,16(1): 103-8. **IF=0.022**

11. A. Aleyasin, **S. Mohammad Ganji**, M. Gazanfari, F. Jahanshad. Parental origin of the meiotic extra chromosome 21 as indicated by short tandem repea (STR) polymorphisms in Down Syndrome. **Archives of Iranian Medicine Journal**, April 2004, 7(2): 118-121. **IF=0.87**

12. M. Noori-Dalooi, Z. Hajebrahimi, L. Najafi, **S. Mohammad Ganji**, M. Sadeghizadeh and M. Sanati. Molecular identification of the most prevalent mutation of G6PD gene in deficient patients in state of Gilan. **J. Sci. I. R. Iran** Autumn 2003,14(4): 327-331. **IF=0.022**

### **Presentations**

1. Is there any association between risk factors obesity and occupational airborne exposure with p14&p15 abberant DNA methylation in esophageal cancer patients? (Accepted for poster presentation at ESHG 2011, "European Conference of Human Genetics 2011", May 28-31,Amesterdam, Netherlands)

2. The role of p16 methylation and obesity in SCCE. (Accepted for poster presentation at ESHG 2010, "European Conference of Human Genetics 2010", June 12-15, Copenhagen, Sweden)
3. Introducing of doing search in the WWW by using search engines. (Accepted for oral presentation at Islamic Azad University, Qom Unite, Dec 29 2010, Qom, Iran)
4. Hermapherodism and its' causes. (Accepted for poster presentation at "inverstigation of sex disorders Conference" 2010, Nov 25, Qom Azad University, Qom, Iran)
5. The role of p16 methylation and obesity in SCCE. (Accepted for poster presentation at ESHG 2010, "European Conference of Human Genetics 2010", May 23-26, Vienna, Austria)
6. Genotyping of AAT in squamous cell carcinoma of esophagus, correlation with phenotype and relevance to tumorigenesis. (Accepted for poster presentation at the 12<sup>th</sup> world congress of the international society for diseases of the esophagus, 2010, Sep 2-5, Kagoshimsa, Japan)
7. Study of Fingerprints in patients with Diabetic Mellitus I in Iran. (Accepted for oral presentation at "Symposium of Diabet", Islamic Azad University, Qom branch, 14-15 Dec, 2009), Qom, Iran.
8. Analysis the correlation of Phenotypes with the Genotypes of the AAT in Esophageal Squamous Cell Carcinoma (SCCE). (Accepted for poster presentation at ESHG 2009, "European Conference of Human Genetics 2009", May 23-26, Vienna, Austria)
9. Country presentation; Iran. (Accepted for oral presentation at the workshop of "S&T Management Training Course for Researchers in OIC Countries" in the Academy of Science Malaysia, 27 August – 7 September, 2007, Kuala Lumpur.
10. G6PD Study in Iran: Incidence and Molecular Genetics Analysis. (Accepted for oral presentation at "Third Saudi Science Conference" New Horizons in Science and Their Applications" in the College of Science, King Saud University, Riyadh 11451, 10 - 13 March, 2007, Kingdom of Saudi Arabia)
11. Bioinformatics: A Powerful Tool for Biology Development to Molecular Biologists (Accepted for oral presentation at "Third Saudi Science Conference" New Horizons in Science and Their Applications" in the College of Science, King Saud University, Riyadh 11451, 10 - 13 March, 2007, Kingdom of Saudi Arabia)
12. Molecular Identification of the Most Prevalent Mutation of Glucose-6-Phosphate Dehydrogenase Gene in Deficient Patient in Sistan and Balochestan Province of Iran.

(Accepted for poster presentation at ESHG 2006, "European Conference of Human Genetics 2006", May 6-9, Amsterdam, The Netherlands)

13. Study on Mediterranean Mutation as the Major Mutations in G6PD Polymorphic Variant Identified in the Three Provinces in South, East and South East of Iran.

(Accepted for poster presentation at ESHG 2005, "European Conference of Human Genetics 2005", May 7-10, 2005, Prague, Czech Republic)

14. Introduction in NCBI including; BLAST, Map Viewer, GenBank, Entrez, Genome Project, OMIM,...(Oral presentation in a workshop on "Application of Bioinformatics in Molecular Biology" in Islamic Azad University, Qom branch, organized by Microbiology Department and Research Deputy), Iran (4-5 Feb, 2005)

15. Study the possibility ways of spreading of prion disease in human by modern biotechnology. (Accepted for poster presentation in the Third Moscow International Congress "Biotechnology: State of the Art and Prospects of Development", Moscow, Russia. March 2005)

16. Molecular genetics of G6PD and determination of two kinds of mutations in G6PD gene in a family in state of Golestan. (Accepted for poster presentation at ESHG 2004, "European Conference of Human Genetics 2004", June 12-15, 2004, ICM, Munich, Germany)

17. Biotechnology and modern economic. (Accepted for poster presentation in the "first congress of Biotechnology, low and economic", Mashad, Iran. April 2004)

18. Determination of mutations in G6PD gene in Northern of Iran. (Accepted for poster presentation at ESHG 2003, "European Congress of Human Genetics Conference 2003", May 3 – 6, 2003, Birmingham, England)

19. Detection of deletions in exons 7 & 8 of the SMN gene in SMA patients in Khouzestan region. (Accepted for poster presentation at ESHG 2003, "European Congress of Human Genetics Conference 2003", May 3 – 6, 2003, Birmingham, England)

20. Distribution of G6PD Mutation in Iran-States of Gilan and Golestan. (Presented as poster in the "International Genetics Congress. Genetics: Global Challenge, Regional Focus "Advances in Community & Preventive Genetics", Shangri-La Hotel, Dubai, United Arab Emirate, (9-11Dec. 2003).

21. Application of Bioinformatics in biology. (Accepted for oral presentation in the "Microbiological News Seminar", Azad Islamic University, Qom, Iran, Dec 2003).

22. Detection of Parental Origin and Stages of Nondisjunction Error in Down syndrome Patients in Iranian Population. (Accepted for oral presentation in the "16<sup>th</sup> FAOBMB symposium", Sept 2002, Taiwan).
23. Detection of Parental Origin and Meiotic Nondisjunction in Down Syndromes in IRAN. (Presented in the "Human Genome Diversity Seminar in Islamic Countries", Tehran, Iran. May. 2002)
24. Study of etiology of aneuploidies in Iranian population. (Accepted for oral presentation in the "Biotechnology Symposium", Kerman, Iran, June 2002)
25. Detection of deletion in exon 7 of the SMN gene in Iranian SMA Patients. (Presented as poster in the "Human Genome Diversity Seminar in Islamic Countries", Tehran, Iran. May. 2002)
26. Detecting the most prevalence of mutation in G6PD gene in Gilan and Golestan provinces of Iran. (Accepted for oral presentation in the "2<sup>nd</sup> Iranian Congress of Genetic Disorders and Disabilities", Welfare and Rehabilitation Sciences University, Tehran, Iran, Dec.2002). <http://www.icgdd.com>
27. Determination of Down syndrome Parental Origin and timing of the chromosome error among some Iranian Down syndromes. (Accepted in the "2<sup>nd</sup> Iranian Congress of Genetic Disorders and Disabilities", Welfare and Rehabilitation Sciences University, Tehran, Iran, Dec.2002). <http://www.icgdd.com>
28. Detection of Meiotic Nondisjunction in Down syndrome. (Accepted for oral presentation in the "10<sup>th</sup> Iranian congress of Biology", Shiraz University, Iran, Sep.2001)
29. Study of methylenetetrahydrofolate reductase gene mutation as a maternal risk factor of Down Syndrome in Iran. (Presented as poster in the "50<sup>th</sup> annual meeting of the American Society of Human Genetics", Pennsylvania Convention Center, Philadelphia, Pennsylvania, USA, Oct. 2000).
30. Study of molecular etiology of Down syndrome in Iran. . (Accepted for oral presentation in the "Second Conference of Medical Genetics", Ardebil, Iran, Sep. 2000)
31. Diagnosis of Plasmodium Falciparum Infection Using PCR in Iranian Patient. (Presented as poster in the "Second Conference of Medical Genetics", Ardebil, Iran, Sep. 2000)
32. Etiology of Down syndrome in Iran. Diagnosis Molecular of Down Syndrome. (Presented in the "Charity Foundation for Special Disease", Tehran, Iran, Mar. 2000)

33. Importance of Prenatal Diagnosis of Down syndrome. (Presented in the "Fifth Reproduction and Infertility Symposium in Ebne-sina Research Center", Tehran, Iran, Jun. 2000)
34. Detection of parental origin of Down syndrome using molecular approach. (Accepted for oral presentation in the "9<sup>th</sup> Iranian congress of Biology", Tehran University, Iran, Aug. 2000)
35. Distribution of G6PD gene in Gilan and Golestan patients. (Accepted for oral presentation in the "11<sup>th</sup> Iranian congress of Biology", Urmia, Iran.2003)
36. Molecular Identification of Mediterranean and Chatham mutation in Glucose-6-Phosphate Dehydrogenase in patient with Favism in Khorasan state. (Accepted for oral presentation in the "4<sup>th</sup> Iranian congress of Biotechnology", Kerman (Mahan), Iran. August 2005)

### **Books:**

- 1- Squamous Cell Carcinoma, ISBN 978-953-307-864-9. Chapter entitled: ""structural features, Biological Functions of the Alpha-1 Antitrypsin and Contribution to Esophageal Cancer ". 2012

### **Scientific activities:**

1. Taking part in the Bioinformatics workshop series "*Phylogenetic Tree*" at the Shahid Beheshti University, The Science & Research Park, Zirab, Mazandaran, ilran (12-14May 2010).
2. Taking part in the international Seminar and workshop of "*New Achievement in Biomedical Engineering & Artificial Organs* " at the University of Tehran, Tehran, Iran (4 Oct 2008).
3. Taking part in the Seminar of "*Stomach Cancer*" in Tehran University, Medical Sciences, Tehran, Iran. (6 July 2008).
4. Taking part in the "*Electrophoresis, 2Dimensional Electrophoresis, Polypeptide Analysis, and Application of Bioinformatics in Proteomics*" Organized by NIGEB, Tehran, Iran. (23- 26 Feb 2008).
5. Taking part in the workshop of "*Systematic Searching*" in Tehran University, Medical Sciences, Tehran, Iran (16 Aug 2007).
6. Taking part in the workshop of "*SPSS*" in Tehran University, Medical Sciences, Tehran, Iran (19, 26 July 2007)
7. Taking part in the workshop of "*Quality Control for products*" in NIGEB, Tehran, Iran (9 Jul 2007)



8. Taking part in the workshop of “**Citation Management, Endnote software**” in Tehran University, Medical Sciences, Tehran, Iran (17 Oct 2006)
9. Taking part in the workshop of “**Scientific Writing, first level (primary)**” in Imam Khomeini Hospital, Tehran, Iran (21 Jun 2005).
10. Taking part in the workshop of “**Scientific Writing, second level**” in Imam Khomeini Hospital, Tehran, Iran (12 Aug 2005).
11. Taking part in the workshop of “**Scientific Writing, third level (Advanced)**” in Children’s Bahrami Hospital, Tehran, Iran (17 July 2005).
12. Taking part in the workshop of “**Scientific Writing, to English**”, Islamic Azad University, Qom branch, Qom, Iran. (25-26, Jun 2005).
13. Taking part in the “**International Congress of Bioethics 2005**” Organized by UNESCO and NRCGEB, Tehran, Iran. (26- 28 March 2005).
14. Conductor and Lecturer in the Workshop on “**Application of Bioinformatics in Molecular Biology**”, Organized by Islamic Azad University, Qom branch, Microbiology Department and Research Deputy, Qom, Iran (4-5 Feb, 2005)
15. Instructor and lecturer of Workshop on “**Application of Molecular & Cellular techniques in Diagnosis of Some Human Genetic Diseases**”, Organized by National Research Center for Genetic Engineering and Biotechnology (NRCGEB) and Institute for Research and Planning in Higher Education, Tehran, Iran. (7-10 March 2004).
16. Taking part in the workshop of “**Bioinformatics**” in National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (Feb, 2004).
17. Taking part in the workshop of “**South East Asian Training Course on Bioinformatics Applied to Tropical Diseases**” in ICGEB, New Delhi, 22 Sept to 6th Oct 2003). A workshop sponsored by UNDP/World Bank/WHO.
18. Chief of assistants in “**Second Regional Workshop on the Application of Advanced Molecular Methods for the Diagnosis of Human Genetic Diseases**”, National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (2–6 May 2002).
19. Taking part in the courses of “**Bioinformatics**” with Medical Biotechnology students in Tarbiat Modares University, Tehran, Iran. (Sep 2001 – Feb 2002).
20. Taking part in the workshop of “**Good Laboratory Practice (GLP)**” in National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (28-29 April, 2002).

21. Taking part in the workshop of “**Bioinformatics**” in National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (Nov-Dec, 2001).
22. Lecturer in the Workshop on “**Diagnosis Molecular of Some Human Genetic Diseases**” in National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (10–14 June 2000).
23. Taking part in the workshop of “**Good Laboratory Practice (GLP)**” in National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (17–19 Sep, 2000).
24. Taking part in the workshop on “**Gene Transformation and Expression in Plants**” in Agricultural Biotechnology Research Institute (ABRII) and National Research Center for Genetic Engineering and Biotechnology (NRCGEB), Tehran, Iran. (24Feb -1Mar, 2000).

#### **Research interests:**

- Human genetic disorders studies.

Genetics and Epigenetic study of cancer as well as working on the miRNAs in cancer for early diagnosis, prognosis and therapy.

#### **Active research Areas:**

- Evaluation of expression of KAI1 as a useful marker in order to detection the metastatic/invasion stage in SCCE
- KAI1 tumor suppressor gene expression assessment in colorectal cancer correlation with tumor stage, metastasis and invasion