

## Curriculum Vitae

### Hatef Ghasemi Hamidabadi



### Personal Information:

First Name: Hatef  
Surname: Ghasemi Hamidabadi  
Date of Birth: 28th of May-1978  
Place of Birth: Sari-Iran  
Gender: Male  
Marital Status: Married and have one daughter

### Business Address:

Department of Anatomical Sciences  
School of Medicine  
Mazandaran University of Medical Sciences  
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## **Education:**

**Ph.D** in Anatomical Sciences minor in Stem Cell & Germ Cell Biology, embryology lab, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran. 2006-2011 ([www.tums.ac.ir](http://www.tums.ac.ir))

**Thesis Supervisor:** Prof. Aligholi Sobhani

**Thesis Advisor:** Prof Masoud Solimani

**Thesis Title:** Effect of co-culture granulosa cells on differentiation embryonic stem cells to oocyte-like cells

**Ph.D Thesis Score:** 19.85 out of 20

M.Sc in Anatomical Sciences, School of Medicine, from Tarbiat Modares University, Tehran, Iran, 2002-2005 (www.)

**Thesis Supervisor:** Prof. M. Salehnia

**Thesis Advisor:** Prof Z. Batahi

**Thesis Title:** Evaluation of alkaline phosphates activity alteration of mouse endometrium and ovary after hyperstimulation during early pseudopregnancy and implantation time

**Ph.D Thesis Score:** 19.70 out of 20

## **Presentations:**

42<sup>nd</sup> annual meeting, ISEH society for hematology and stem cells, 22-25 aguset 2013, Viena, Austria.

4<sup>th</sup> Asian-Pacific International Congress of Anatomis, 7-10 septamber 2005 Kusacasi-Turkey, Turkey.

Internatinal Research Award`s Scientific Congress, September 7-9 2005 Royan, Tehran- Iran.

13<sup>th</sup> World Congress on In Vitro Fertilization Assisted Reproduction & Genetics, May 26-29, 2005 Istanbul, Turkey, Turkey.

8<sup>th</sup> Congress on Reproductive Biomedicine & 3<sup>th</sup> Congress on Stem Cells Biology & Technology, Royan.Tehran-Iran Summer 2008.

## Curriculum Vitae-Hatef Ghasemi Hamidabadi, Ph.D.

7<sup>th</sup> Congress on Reproductive Biomedicine& th  
Congress on Stem Cells Biology & Technology,  
Royan, Summer 2007 Royan, Iran

6<sup>th</sup> Congress on Reproductive Biomedicine& th  
Congress on Stem Cells Biology & Technology:  
Summer 2006 Royan, Iran.

8<sup>th</sup> Congress on Reproductive Biomedicine& 3<sup>rd</sup>  
Congress on Stem Cells Biology & Technology:  
September 5-7 2007 Royan, Tehran- Iran.

11<sup>th</sup> Congress on Reproductive Biomedicine& 3<sup>rd</sup>  
Congress on Stem Cells Biology & Technology:  
September 2-4 2015 Royan, Tehran- Iran.

5<sup>th</sup> Annual Meeting of the German Society for  
Stem Cell Research (GSZGermany, Lubeck, Stem  
Cell.

5<sup>th</sup> Annual Meeting of the German Society for  
Stem Cell Research (GSZ): Bone Morphogenetic  
Protein 4 role on In vitro Differentiation of  
Primordial Germ Cells from Mouse Embryonic  
Stem Cells. Poster Presentation, Germany, Lubeck,  
Stem Cell.

3<sup>rd</sup> International and the 6<sup>th</sup> National Congress on  
Hematopoietic Stem Cell Transplantation and the  
1<sup>st</sup> Regenerative Medicine Congress, 14-16  
January, 2016, Tehran-Iran.

4<sup>th</sup> Basic And Clinical Neuroscience Congress,  
December 23-25, 2015, Terhran-Iran.

5<sup>th</sup> Basic And Clinical Neuroscience Congress,  
December 7-9, 2016, Terhran-Iran.

6<sup>th</sup> Basic And Clinical Neuroscience Congress,  
December 20-22, 2017, Terhran-Iran.

10<sup>th</sup> FENS Forum of Neuroscience, 2-6 July, 2016,  
Copenhagen, Denmark.

12<sup>th</sup> Iranian Congress of Anatomical Sciences,  
May 4-6, 2016, Shahid Beheshti University of  
Medical Sciences, Tehran-Iran.

### **Workshops:**

Participation in the workshop of research method in 2005

Participation in the workshop of Scientific writing (advance level ) in 2007

Participation in the workshop of Laser Microdissection in 2006

Optogenetic Workshop in Shahid Beheshti University of Medical Science, 2017

End Not Workshop in Terhan University of Medical Science, 2007

### **Grants, Awards and Scholarships:**

Ministry of Health services and Medical education of Iran Scholarship For 6<sup>th</sup> months research period in The University of Leiden, Leiden, and the Netherlands (\$20000).

Top university lecturer and researcher in Anatomical sciences. A Plaque for Excellence Presented by the Chancellor of Mazandaran University of Medical Sciences, Sari, Iran (2015).

Council for Stem Cell Sciences and Technologies, Tehran, Iran, 2014 (\$6000).

Council for Stem Cell Sciences and Technologies, Tehran, Iran, 2015 (\$6000).

Council for Stem Cell Sciences and Technologies, Tehran, Iran, 2015 (\$6000).

### **Teaching and Research Experience:**

Graduate Teaching Associate, Department of Anatomical sciences, School of Medicine, Tarbiat Modares University of

Medical Sciences, Tehran, Iran (2005)

Graduate Teaching Associate, Department of Anatomical sciences, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, 2011 (TUMS)

Associate Professor of Anatomical sciences and Academic Member of Mazandaran University of Medical Sciences, Sari, Iran, 2011-Present

### **Laboratory Techniques:**

1. Light Microscope (LM)
2. Immunohistochemistry (IHC)
3. Immunocytochemistry (ICC)
4. Flowcytometry & FACS analysis
5. RT-PCR
6. Cell Culture
7. Organotype Cell Culture
8. Perfusion
9. Neuronal Specific Staining
10. Electrophysiology
11. Fixation and dissection of human and animal body
12. Optogenetic

### **Teaching Activities:**

Human Anatomy for Medical students (Thorax, abdomen, pelvis, head, neck, limbs and neuroanatomy) in Mazandaran University of Medical Sciences, Sari, Iran.

2011-Present.

Human Anatomy for Dentistry students (Head and neck) in Mazandaran University of Medical Sciences, Sari, Iran. 2011-Present.

Lectures to paramedical students (General Anatomy) in Mazandaran University of Medical Sciences, Sari, Iran. 2011-Present.

### **Grants Funded:**

Evaluation of in vitro differentiation of dental pulp stem cells to neuron-like cells in presence of cerebrospinal fluid and spinal cord repair in adult rat spinal cord injury model

Myelin repair after transplantation of oligoprogenitor cells into demyelination model

In vitro transdifferentiation of spermatogonia stem cells into neuron-like cells and transplantation to rat spinal cord injury model

### **Postgraduate Honors Thesis**

### **Supervised or Co-supervised:**

Mahsa Niazi (M.Sc student in Anatomical

sciences, **Mazandaran University of Medical Sciences, Sari, Iran).**

Thesis title: Differentiation of mesenchymal human dental pulp stem cells into dopaminergic neurons based on opsin ChR2 and functional evaluation in an animal model of Parkinson's disease with optogenetics technique. 2016-2017.

Sara Haratizadeh (**M.Sc student in Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran).**

Thesis title: In vitro differentiation assessment of dental pulp stem cells into neural-like cells in presence of cerebrospinal fluid. 2015-2016.

Ahmad Zeinalzade (**Ph.D student in Department of Audiology, School of Rehabilitation Sciences, Iran University of Medical Sciences, Tehran, Iran).**

Thesis title: The effect of low – level laser on a prevention of noise – induced hearing loss in Guinea pig. 2016-2017.

Mino Vardiani (**Ph.D student in Anatomical sciences, Shahid Beheshti of Medical Sciences, Tehran, Iran).**

Thesis title: The study of differentiation of mouse embryonic stem cell into male germ cells utilizing gelatin nanofibrous 3D scaffold and co-culture with Sertoli cells. 2016-2017.

Alireza Rahgazar (**M.Sc student in Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran).**

Thesis title: Synergistic effect of human chorionic gonadotrophin and Nandrolone Decanoate on histologic and morphometric structure of testis in adult rats. 2014-2015.

Masume Behruzi (**M.Sc student in Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran).**

Thesis title: Effect of Hydroxyapatite/Fibroin compared to Hydroxyapatite/Gelatin in repair of Rat critical bone defect. 2014-2015.

Gazaleh Godarzi (**M.Sc student in Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran).**

Thesis title: Evaluation of In vitro effect of cerebrospinal fluid and medium derived from

schwann cells on differentiation of bone marrow stromal cells to neuron-like cells and spinal cord repair in rat spinal cord injury. 2013-2014.

Somayeh Tadayoni Lehi (**M.Sc student in Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran**). Thesis title: Effect of melatonin and all-trans retinoic acid on maturation, fertilization and embryo development of immature mouse oocytes in vitro. 2013-2014.

Maedeh Entezari (**M.Sc student in Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran**). Thesis title: Evaluation of the effect of mouse embryonic fibroblast cells co-culture and its conditioned medium on in vitro maturation of mouse immature oocytes. 2012-2013.

Roohollah Ebrahim Pour Malekshah (**M.Sc student in Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran**). Thesis title: Effect of Leptin during in vitro maturation, fertilization and embryonic development of mouse germinal vesicle oocyte. 2011-2012.

### **Professional Services:**

Curriculum Committee of Mazandaran medical school, Sari, Iran.

Set up a Cell Culture Lab at Department of Anatomical sciences, Mazandaran University of Medical Sciences, Sari, Iran.

Member of Scientific Committee of Mazandaran University of Medical Sciences, Sari, Iran and medical education for making national Exam from medical students, Sari, Iran.



### **Professional Memberships:**

Iranian Society of Anatomical Sciences (ISAS). 2007- present.

Iranian Neuroscience Society. 2014-present.

German Neuroscience Society. 2016-2017.

### **Bibliography:**

**Neuroanatomy with Clinical Points.** M. Akbari, Gh. Hassanzadeh, H. Ghasemi, R. Seifali. 2017.

**Multiple Sclerosis perspectives in Treatment and Pathogenesis.** 6<sup>th</sup> chapter of this book as entitle" **Stem Cell Therapy: A Promising Therapeutic Approach for Multiple Sclerosis,** published by Codon publications. Freshteh Pourabdolhossein, Hatef Ghasemi Hamidabadi, Maryam Nazm Bojnordi, Sina Mojaverrostami. 2017.

**General Anatomy.** Hatef Ghasemi, Maryam Nazm Bojnordi, Sina Mojaver, Mojtabal Haj Hosseini. 2017.

**Fertilization.** Maryam Nazm Bojnordi, Hatef Ghasemi. 2017.

**Atlas of Oral Histology & Embryology.**

Noori Mougahi SMH, Minaii Zanghii B,  
Choobineh H, Rahmani M, Ghasemi H,  
Tack Zareeh, Maleck F. 2011.

## **Publications:**

1. **Ghasemi Hamidabadi, H.**, Rezvani, Z., Nazm Bojnordi, M., Shirinzadeh, H., Seifalian, A.M., Joghataei, M.T., Razaghpour, M., Alibakhshi, A., Yazdanpanah, A., Salimi, M., Mozafari, M., Urbanska, A.M., Reis, R.L., Kundu, S.C., Gholipourmalekabadi, M. Chitosan-Intercalated Montmorillonite/Poly(vinyl alcohol) Nanofibers as a Platform to Guide Neuronlike Differentiation of Human Dental Pulp Stem Cells. (2017) **ACS Applied Materials and Interfaces**, **9** (13), pp. 11392-11404.
2. Maryam Nazm Bojnordi & Hossein Azizi & Thomas Skutella & Mansoureh Movahedin & Fereshteh Pourabdolhossein & Amir Shojaei **Hatef Ghasemi Hamidabadi**. Differentiation of Spermatogonia Stem Cells into Functional Mature Characterized with Differential Gene Expression. **Mol Neurobiol DOI 10.1007/S12035-016-0097-7**.
3. Sara Haratizadeh<sup>1</sup>, Maryam Nazm Bojnordi<sup>1,2</sup>, Shahram Darabi<sup>3</sup>, Narges Karimi<sup>4</sup>, Mehrdad Naghikhani<sup>5</sup>, **Hatef Ghasemi Hamidabadi**<sup>1,6</sup>, Morteza Seifi. Condition medium of cerebrospinal fluid and retinoic acid induces the transdifferentiation of human dental pulp stem cells into neuroglia and neural like cells. **Anat Cell Biol 2017;50:107-114**.
4. Marzieh Sharifi Pasandi <sup>1,2</sup> & Farshad Hosseini Shirazi<sup>3,4</sup> & Mohammad Reza Gholami<sup>5</sup> & Hossein Salehi<sup>6</sup> & Nowruz Najafzadeh<sup>7</sup> & Mohammad Mazani<sup>2</sup> & **Hatef Ghasemi Hamidabadi**<sup>8</sup> & Ali Niapour<sup>7</sup>. Epi/perineural and Schwann Cells as Well as Perineural Sheath Integrity are Affected Following 2,4-D Exposure. **Neurotox Res (2017) 32:624–638**.
5. **Hatef Ghasemi Hamidabadi**, Maryam Nazm Bojnordi.

Co-culture of mouse spermatogonial stem cells with sertoli cell as a feeder layer, stimulates the proliferation and spermatogonial stemness profile. **Middle East Fertil Soc J** (2017), <http://dx.doi.org/10.1016/j.mefs.2017.09.004>.

6. Moayeri, A., Nazm Bojnordi, M., Haratizadeh, S., Esmailnejad-Moghadam, A., Alizadeh, R., & **Ghasemi Hamidabadi, H.** (2017). Transdifferentiation of Human Dental Pulp Stem Cells Into Oligoprogenitor Cells. **Basic and Clinical Neuroscience**, 8(5):387-394.
7. **Ghasemi Hamidabadi H**, Sobhani A, Nazm Bojnordi M. Multipotent SSEA-1 positive cells population differentiation into primordial germ cells and subsequently progress into oocyte-like cells. **Arch Iran Med.** 2015; 18(7): 404 – 410.
8. Nazm Bojnordi M<sup>1</sup>, **Ghasemi HH<sup>1</sup>** and Akbari E Remyelination after Lysophosphatidylcholine - induced demyelination is stimulated using Bone Marrow Stromal Cell derived Oligoprogenitor cells transplantation. **Cell Tissue Organ.** 2015.
9. Sara Haratizadeh, Maryam Nazm Bojnordi, Ali Niapour, Mehrdad Bakhtiari, **Hatef Ghasemi Hamidabadi.** Improvement of Neuroglial Differentiation from Human Dental Pulp Stem Cells Using CSF. **J Mazandaran Uni Med Sci** 2016; 26 (140): 1-14 (Persian).
10. Ghazaleh Goudarzi1, **Hatef Ghasemi Hamidabadi**, Alireza Abdanipour, Homa Mohseni Kouchesfehani, Amir Esmailnejad Moghaddam. The Influence of Cerebrospinal Fluid Accompanied by Retinoic Acid on Differentiation of Bone Marrow Mesenchymal Stem Cells into Neuron-like Cells In Vitro. **Pathobiology Research**, Vol. 18 (2015-2016), No.4, Pages: 79-91.
11. Nazm Bojnordi M, **Ghasemi Hamidabadi H.** Spermatogonia stem cells: A new pluripotent source for repairment in regenerative medicine. **RMM.** 2015. 2015, Vol: 3, Issue: 1, Pages: 1- 4.
12. Gholipourmalekabadi M, Mozafari M, Gholipourmalekabadi M, Bojnordi MN, Hashemi-Soteh MB, Salimi M, Rezaei N, Sameni M,

Samadikuchaksaraei A, **Hamidabadi HG**. In vitro and in vivo evaluations of three-dimensional hydroxyapatite/silk fibroin nanocomposites scaffolds. **Biotechnol Appl Biochem**. 2014 Sep 4 doi: **10.1002/bab.1285**.

13. Nazm Bojnordi, M. Movahedin, T. Tiraihi M. Javan. **H. Ghasemi Hamidabadi**. Oligoprogenitor Cells Derived from Spermatogonia Stem Cells Improve Remyelination in Demyelination Model M. **Mol Biotechnol DOI 10.1007/s12033-013-9722-0, Now 2013**.
14. Gholipourmalekabadi M<sup>1</sup>, Mozafari M, Bandehpour M, Salehi M, Sameni M, Caicedo HH, Mehdipour A, **Ghasemi H**, Samadikuchaksaraei A, Ghanbarian H. Optimization of nanofibrous silk fibroin scaffolds as a delivery system for bone marrow adherent cells. **Biotechnol Appl Biochem**. 2014 Dec 4. doi: **10.1002/bab.1324**.
15. **Hatef Ghasemi Hamidabadi, Ph.D.1**, Parichehr Pasbakhsh, Ph.D.1, Fardin Amidi, Ph.D.1, Masoud Soleimani, Ph.D.2, Mehdi Forouzandeh, Ph.D.3, Aligholi Sobhani, Ph.D. Functional Concentrations of BMP4 on Differentiation of Mouse Embryonic Stem Cells to Primordial Germ Cells. **IJFS. Vol 5, No 2, Jul-Sep 2011, Pages: 104-109**.
16. **Hatef Ghasemi Hamidabadi**, Nourollah Rezaei, Reza Mahmoudi, Maryam Nazm Bojnordi. Expression of Spermatogonial and Pluripotency markers in Spermatogonial stem cells after treatment with Different culture factors. **Research in Molecular Medicine, 2014, Vol: 2, Issue: 2, Pages: 1-6**.
17. **Ghasemi Hamidabadi H, Ph.D.**, Rezaei N, Ph.D., Setorg R MSc, Abediankenari S, Ph.D., Latifpour M, Ph.D., Malekzadeh Shafarudi M The Concurrent Effect of 5-Azacytidin and DMSO on In Vitro Differentiation Induction of Cardiomyocytes from Embryonic Carcinoma cells P19. **Journal of Cell & Tissue, Autumn 2014; 5(3): 317-324. Original Article**.
18. Ebrahim Pour Malekshah R, M.Sc. 1, Malekzadeh

Shafaroudi M, Ph.D.2, **Ghasemi Hamidabadi H**, Ph.D.2, Esmaeil Nejad Moghaddam A, Ph.D.2, Rezaei N, Ph.D.2\* Investigating the Effect of Leptin on In Vitro Maturation, Fertilization and Embryonic Development of Immature Mouse Oocytes. **Journal of Cell & Tissue (JCT) Original Article Winter 2015; 5(4): 409-416.**

19. Nazm Bojnordi M, Rezaei N, **Ghasemi Hamidabadi H**. Characterization of Pluripotency Markers Expression on ES-like Cells derive from Spermatogonia Stem Cells and Embryonic Stem Cells. **Journal of Cell & Tissue (JCT) Original Article Summer 2014; 5(2): 147-155.**
20. Majid Malekzadeh Shafaroudi., Nourolah Rezaei, Saeid Abedian kenari ., Raha Setorg, Mostafa Latifpour., **Hatef Ghasemi Hamidabadi**. The Effect of DMSO Inducer on In Vitro Differentiation of Cardiomyocytes from Embryonic Carcinoma cells P19. (2015) **Illam university of medical science, 23 (1), 112-118.**
21. Nikseresht M , Rasti T, Jafari Barmak M, **Ghasemi Hamidabadi H**, Rezaei Z, Dehghani F, Mahmoudi R. sjimu. In Vitro Maturation and Embryo Development to blastocyst Mouse Germinal Vesicle Oocytes after Vitriification. **Armaghane-danesh, Yasuj University of Medical Sciences Journal (YUMSJ) November 7th 2016, 590-602.**
22. **Ghasemi H.**, M.Sc., Salehnia M., Ph.D., Batahi Z., Ph.D. Evaluation of Alkaline Phosphatase Activity Alteration in Mouse Endometrium after Ovarian . Hyperstimulation during Early Pseudo and Natural pregnancy until Implantation time. **Journal of Iranian Sciences.2003 Autumn;3(3):173-184.**
23. M.Nazm Bojnordi, M,Sc, M. Movahedin,Ph.D, S. Amanpour, Ph.D, **H. Ghasemi Hamidabadi, M.Sc.** Effect of Antioxidants supplementation on human sperm parameters after freezing. **Journal of Mazandaran University of Medical Sciences.2008 May; 18(63):20-27.**
24. **H. Ghasemi Hamidabadi, M.Sc**, Salehnia M., Ph.D, Batahi Z., Ph.D. A Camparitive Study of Mouse Ovarian Alkaline Phosphatase Activity in Normal and Psudopregnancies. **Yakhteh Medical Journal.2006 spring; 8(1): 53-59.**

25. Khoshvaghti A., Ph.D., **Ghasemi H., M.Sc.** Hatef Ghasemi, The Effect of Three-Dimensional Model on Anatomy Learning of Middle Ear. **Journal of Iranian Anatomical Sciences, Vol 7, Autumn 2009 & Winter 2010, Pages 153-162.**
26. **Ghasemi HH**, Sobhani A, Pasbakhsh P, Amidi F, Frozandeh A. In vitro Differentiation of Primordial Germ cells from Mouse Embryonic Stem Cells in Presences of Different Concentrations of Bone Morphogenic Protein 4. **Journal of Cell and Tissue Research Vol. 11(2) 2741-2750 (2011).**
27. Maedeh Entezari Najafabadi, AbbasaliKarimpour Malekshah, Amir Esmailnejad Moghaddam, **Hatef Ghasemi Hamidabadi**, Mahmoud Heidari. Effect of Embryonic Fibroblast Cells Conditioned Medium on in Vitro Maturation of Immature Mouse Oocytes. **J Mazand Univ Med Sci 2014; 24 (Supple 1): 107-114 (Persian).**

**Review for journals:**

Journal of Mazandaran University of Medical Sciences, Mazandaran University of Medical Sciences, Sari, Iran. 2011-present.

Cell journal (Yakhteh). 2015-present.

Andrologia, 2016- present.