

Academic CV of Nehleh Zareifard

Assistant Professor (PhD), Department of Anatomical Sciences,
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Personal Information

First name: Nehleh
Date of Birth: 1976
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Educational background

| Degree | Field | Institution | City | Country | Date |
|--------|---------|---------------------------------------|--------|---------|------|
| Ph.D. | Anatomy | Shiraz university of medical sciences | Shiraz | Iran | 2013 |
| M.Sc. | Anatomy | Kerman university of medical sciences | Kerman | Iran | 2003 |

Publications

1. A Emami, T Talaei-Khozani, Z Vojdani, N **Zarei-fard**. Comparative assessment of the efficiency of various decellularization agents for bone tissue engineering. Journal of Biomedical Materials Research Part B. 2021
2. A Hooshmand-Ardakani, T Talaei-Khozani, M Sadat-Shojai, S Bahmanpour, and N **Zarei-fard**. In Vitro Characterization of Multilamellar Fibers with Uniaxially Oriented Electrospun Type I Collagen Scaffolds. Advances in Materials Science and Engineering. 2020
3. Z Panahi Balalami, N **Zarei-fard**. A right accessory vertebral artery and variation in the origin and its entry to the transverse foramen. Medical Journal Of Tabriz University of Medical Sciences and Health Services. 2020

4. A Emami, T Talaei-Khozani, N, S Tavanafar, N **Zarei-fard**, N **Azarpira**, Z Vojdani, Synergic effects of decellularized bone matrix, hydroxyapatite, and extracellular vesicles on repairing of the rabbit mandibular bone defect model. *Journal of Translational Medicine*. 2020
5. A Soleimani, N **Zarei Fard**, T Talaei-Khozani, S Bahmanpour. Epidermal growth factor and three-dimensional scaffolds provide conducive environment for differentiation of mouse embryonic stem cells into oocyte-like cells. *Cell Biology International* 2020
6. S Bahmanpour, A Keshavarz, N **Zarei Fard**. Effect of Different Concentrations of Forskolin Along with Mature Granulosa Cell Co-Culturing on Mouse Embryonic Stem Cell Differentiation into Germ-Like Cells. *Iranian Biomedical Journal* 2020
7. S Bahmanpour, T Talaei Khozani, A Soleimani, N **Zareifard**. Germ cell differentiation of mouse embryonic stem cells can be influenced by the culture medium. *Biotechnic & Histochemistry* 2019
8. N **Zareifard**, A Soleimani, T Talaei-Khozani, S Bahmanpour. Improved BALB/c mice granulosa cell functions using purified alginate scaffold. *Iranian Journal of Veterinary Research* 2018
9. S Shahsavari-Pour, E Aliabadi, M Latifi, N Zareifard, MR Namavar. Evaluation of the Possible Synergic Regenerative Effects of Platelet-Rich Plasma and Hydroxyapatite/Zirconia in the Rabbit Mandible Defect Model. *Iranian journal of medical sciences*. 2018
10. Bahmanpour S, **Zarei Fard N**, Talaei-Khozani T, Hosseini A, Esmaeilpour T. Effect of BMP4 preceded by retinoic acid and co-culturing ovarian somatic cells on differentiation of mouse embryonic stem cells into oocyte-like cells. *Develop. Growth Differ.* 2015
11. **Zarei fard N**, Talaei-khozani T, Bahmanpour S, Esmaeilpour T. Comparison of cell viability and embryoid body size of two embryonic stem cell lines after different exposure times to bone morphogenetic protein4. *Iran J Med Sci*. 2014; 40(2) :110-117
12. Talaei-Khozani T, **Zarei Fard N**, Bahmanpour S, Jaberipour M, Hosseini A, Esmaeilpour T. Delayed BMP4 exposure increases germ cell differentiation in mouse embryonic stem cells. *Rom J Morphol Embryol*. 2014; 55(2):297–303
13. Bahmanpour.S, Talaei Khozani T, **Zarei fard N**, Jaberipour M, Hosseini A, Esmaeilpour T. A comparison of the multiple oocyte maturation gene expression patterns between the newborn and adult mouse ovary. *Iran J Reprod Med*. 2013; 11(10): 815-822
14. Eftekhari Vaghefi S.H, **Zareii fard N**, Shahidzadeh Z, Nematollahi Mahani S.N. Isolation and cultivation of ES-like cell colonies from NMRI mice embryos *Iran J Reprod Med*. 2009, 7(4):145-152

15. Hassanzadeh G, **Zarei fard** N. A variation of lateral cord of brachial plexus – A case report. *J Gorgan Uni Med Sci.* 2008; 9(40):72-75

Congress presentations

1. Effect of bioactive nanofillers on the biological properties of bio-based composite Scaffolds. 16th National Congress of Biochemistry & 7th International Congress of Biochemistry & Molecular Biology, 2020
2. A Rare Variation In The Right Vertebral Artery Origin And Its Entry To The Transverse Foramen. 13th Iranian Anatomical Sciences. Hamadan University of Medical Sciences, Iran, 2018
3. 3D culture within purified alginate improves murine granulosa cell functions. 13th Iranian Anatomical Sciences. Hamadan University of Medical Sciences, Iran, 2018
4. The evaluation of possible synergic effects of platelet rich plasma and hydroxyapatite/zirconia in rabbit mandible defect model. Second international congress on stem cell and regenerative medicine, 2017
5. Differentiation of monolayer cultures of embryonic stem cells into oocyte like cell mediated by retinoic acid and granulosa cells. TERMIS conference in Davos, 2017
6. Culture Media affect germ cell differentiation in mouse embryonic stem cells. 2th Microscopic studies of Histomorphometry and Stereology center, Iran, 2016
7. Synergistically induction differentiation of mouse embryonic stem cells to germ cells by retinoic acid and ovarian somatic cells. 2th Microscopic studies of Histomorphometry and Stereology center, Iran, 2016
8. Culture medium composition modulate germ cell differentiation from mouse embryonic stem cells. 12th Iranian Anatomical Sciences. Shahid Beheshti University of Medical Sciences, Iran, 2016
9. Oocyte like cell differentiation of mouse embryonic stem cells two step cultivation. 7th Asia Pacific International Congress of Anatomists, Singapore, 2016
10. Oocyte like cell differentiation of mouse embryonic stem cells two step cultivation. 1st Internal Congress on Reproductive Health and Childbearing, Iran, 2015
11. Differentiation of Monolayer Cultures of Embryonic Stem Cells into Oocyte-Like Cells Mediated by Retinoic Acid and Granulosa Cells. 15th Congress on Reproductive Biomedicine and 10th Stem Cells Biology & Technology, Iran, 2014
12. Effects of retinoic acid and ovarian somatic cell co-culturing on oocyte differentiation from oocyte-like cells. 20th National Congress on Infertility and Reproduction, Iran, 2014
13. Bmp4 exposure increases expression of meiotic markers during differentiation of germ cells from mouse embryonic stem cells. 20th National Congress on Infertility and Reproduction, Iran, 2014

14. Embryoid body is more similar to epiblast from mouse embryos by short-term exposure of BMP4. 1th Microscopic studies of Histomorphometry and Stereology center, Iran, 2014
15. Time-dependent manner of Bmp4 exposure induces germ cell differentiation in mouse embryonic stem cells. 1th Microscopic studies of Histomorphometry and Stereology center, Iran, 2014
16. Comparison of cell viability and embryoid body size of two embryonic stem cell lines after different exposure times to bone morphogenetic protein4. 11th Iranian Anatomical Sciences. Ahvaz University of Medical Sciences, Iran, 2013
17. A comparison of the multiple gene expression patterns between the newborn and adult mouse ovary. 19th National Congress on Infertility and Reproduction , Iran, 2013
18. An approach for increasing germ cell markers in mouse embryonic stem cells. 10th Iranian Anatomical Sciences. Guilan University of Medical Sciences, Iran, 2012
19. The effect of composition of the culture media on mouse embryonic stem cells differentiation to germ cell development. 18th National Congress on Infertility and Reproduction , Iran, 2012
20. -Transplantation of bone marrow mesenchymal stem cell can improve polycystic ovaries appearance in rat model. 16th Congress of Iranian Society for Reproductive Medicin,Iran, 2010
21. Cultivation of mouse embryos to isolate embryonic stem cells. 10th Annual scientific meeting. Middle East Fertility Society .Lebanon, Beirut ,2003
22. Effect of different feeder layers and serum supplement on development of mouse embryos.9th Annual scientific meeting. Middle East Fertility Society. Egypt, 2002

Teachings

2014- Present Postgraduate students of Shiraz University of Medical Sciences, Shiraz, Iran

2012- Present Anatomy of Upper Limbs to student of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

2012- Present Basic Histology to student of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

2012- Present Basic Histology to student of dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

2007- Present Anatomy to student of Radiology, Physiotherapy, Nursing, Midwife, Operation Room Technician, Laboratory Sciences or Occupational therapy. Shiraz University of Medical Sciences, Shiraz, Iran

2010- 2014 Basic Histology to student of Medicine, Jahrom University of Medical Sciences, Jahrom, Iran

2010- 2014 Anatomy of Upper and Lower Limbs to student of Medicine, Jahrom University of Medical Sciences, Jahrom, Iran

2003- 2007 General anatomy to student of Nursing, Midwife, Operation Room Technician, Radiology, Laboratory Sciences, Librarianship and Practical Anatomy to student of Medicine. Hormozgan University of Medical Sciences, Bandar Abbas, Iran

Research Interests

- Differentiation of stem cells
- Molecular Biology of gametes
- Clinical Embryology
- In vitro maturation (IVM) of oocyte
- Tissue engineering
- Regenerative medicine

Technical Skills

- Primer Designing with Allele ID &Primer Express
- RT PCR and Real time RT PCR
- Immunocytochemical technique
- Flow cytometry technique
- MTT Assay
- DNA quantification analysis
- Decellularization of tissue
- Electrospinning
- Isolation of embryonic stem cells from blastocyst embryo
- Culture of embryonic stem cells
- Differentiation of stem cells into gametes
- Isolation and culture of mesenchymal stem cell from bone marrow, umbilical cord, and Fat
- Flushing of mouse embryo from fallopian tube
- In vitro maturation (IVM) of oocyte

Presentation of Workshop

- Member of organizing committee in summer school of Stem cell and regenerative medicine, Shiraz medical school, Shiraz-Iran, (2012)
- Theory and Practice of Embryonic stem cell culture in summer school for postgraduate students, Shiraz University of Medical Sciences, Shiraz, Iran, (2012)