# Masoumeh Fakhr Taha, Ph.D.

## **Assistant Professor and Senior Research Scientist**

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#### **EDUCATION**

- **B.Sc. in Physiotherapy**, Tehran University of Medical Sciences, Iran, 1993–1997.
- M.Sc. in Anatomical Sciences, Tarbiat Modarres University, Iran, 1998–2000.
   Project title: Quantitative and Qualitative Changes of the Seminiferous Epithelium Induced by Infrared Laser Radiation.
- **Ph.D. in Anatomical Sciences**, Tarbiat Modarres University, Iran, 2000–2006.

  Project title: The effect of BMP- 4 on C57BL/6 mouse embryonic stem cell- derived cardiomyocyte differentiation
- **Postdoctoral Research Training,** Translational Research Center, Kyoto University Hospital, Japan, Aug. 2005- Feb. 2006.

### **HONORS AND AWARDS**

- Member of the National Elites Foundation of Iran, Since 2008
- Young investigator research award from the National Elites Foundation of Iran,
   2008
- Best Instructor, Jehad Daneshgahi of Shahid Beheshti University, Tehran, Iran,
   2007
- Ranked First among Ph.D. graduates of Anatomical Sciences (Score 19.34/20),
   2006
- Ranked first in Ph.D. entrance exam of Tarbiat Modares University in all fields of Medical Faculty, 2000
- Ranked First among M.Sc. graduates of Anatomical Sciences (Score 18.88/20),
   1999

• Ranked Second among B.Sc. graduates of Physiotherapy (Score 18.15/20), 1996

## PREVIOUS AND CURRENT RESEARCH PROJECTS

## National Institute of Genetic Engineering and Biotechnology (NIGEB)

- Induction of cardiac differentiation from mouse adipose tissue stromal cells by coculture with adult cardiomyocytes (*Director*).
- Production of induced pleuripotent stem (iPS) cells from adipose tissue-derived stromal cells by miR-302 transfection and its effect on cardiomyocyte differentiation (Grant from National Elites Foundation of Iran, *Director*).
- Neurogenic differentiation of adipose tissue-derived stem cells (In collaboration with Medical University of Lorestan, *Director*).
- Cardiac differentiation of adipose tissue stem cells under the effect of oxytocin and relaxin (In collaboration with Medical University of Urmia, *Director*).
- Endoderm differentiation from mouse embryonic stem cells at the presence of bone morphogenetic protein-4, *Director*)
- Human adipose tissue-derived stem cells reprogramming using cytoplasmic extract of embryonic stem cells and its effect on dopaminergic neuron differentiation (*Director*).
- The effect of miR-195 on the expression of invasion and angiogenesis markers in human colon cancer cells (*Director*).
- The effect of miR-146a-induced suppression of CXCR4 on proliferation and invasion of colorectal cancer cells (*Director*).
- The impact of miR-302/367 cluster overexpression and Rapamycin on mTOR signaling pathway in breast cancer cells (*Director*).
- Study the effect of RG108 small molecule on neural differentiation of adipose tissuederived stem cells (*Director*).

## Translational Research Center, Kyoto University Hospital, Japan

Postdoctoral Research Training, Aug. 2005- Feb. 2006

- DNA-plasmid construction and genetically modification of embryonic stem cells (C0-investigator).
- C2C12 myoblast cell dedifferentiation and redifferentiation (C0-investigator).
- cDNA library synthesis (**C0-investigator**).

### **TEACHING EXPERIENCE**

## Courses

#### Stem cells

Lecturer, for Cell Biology Students (PhD), 2019
National Institute of Genetic Engineering and Biotechnology, Iran.

### · Advanced cell culture

Lecturer, for Cell Biology Students (PhD), 2013 National Institute of Genetic Engineering and Biotechnology, Iran.

### • Cell and Tissue Culture

Lecturer, for Cell Biology Students (MSC), 2010-2019

National Institute of Genetic Engineering and Biotechnology, Iran.

## Medical biotechnology

Lecturer, for Cell Biology Students (MSC), 2009-2011 National Institute of Genetic Engineering and Biotechnology, Iran.

### Embryology

Lecturer, for Anatomy and Obstetrics Students (BSc and MSc), 29 groups, 2002-2011 Tarbiat Modarres University, Jehad Daneshgahi of Shahid-Beheshti University, Modaresan Sharif and Modaresan Nemooneh of Tehran

### Histology

Lecturer, for medical Students (MD), Sept. 2001- Sept. 2002 Qazvin University of Medical Sciences, Iran

## • Practical Anatomy

Instructor, for Anatomical sciences students (MSc), 2000 Tarbiat Modarres University, Iran

## Practical Histology

Instructor, for Anatomical sciences students (MSc), 2000 Tarbiat Modarres University, Iran

## Anatomy, Cytology and Histology

Lecturer, for obstetrics and nursing students (BSc), Sept. 1999- Sept. 2000 Mashad University of Medical Sciences, Iran

### Practical anatomy

Instructor, for Nursing students (BSc), Sept. 1999- Sept. 2000 Islamic Azad University, Bodjnord, Iran

# Embryology, Cytology and Histology

Lecturer, for Obstetric students (BSc), Sept. 1999- Sept. 2000 Islamic Azad University, Bodjnord, Iran

### SUPERVISORY EXPERIENCE

## Supervisor of PhD/MSc students

- 1. Nazli Jafarzadeh (MSc student) Evaluation of oxytocin effect on neuron differentiation from mouse adipose tissue derived stem cells.
- 2. Maryam Khaleghi (MSc student) Effect of bone morphogenetic protein-4 (BMP-4) on cardiomyocyte differentiation from mouse adipose tissue-derived stem cells.
- 3. Mohammad Hassan Soheilifar (MSc student) Dopaminergic neuronal differentiation of human adipose tissue-derived stem cells.
- 4. Sehar Mobasseri (MSc student) Dopaminergic differentiation of human adipose tissue-derived stem cells after reprogramming by cytoplasmic extract of embryonic stem cells.
- 5. Afrooz Hashemi (MSc student) Adipose tissue-derived stem cells reprogramming using small molecule RG108.
- 6. Zahra Frouzan Jahromi (MSc student) The effect of miR-195 on the expression of invasion and angiogenesis markers in human colon cancer cells.
- 7. Mojtaba Saghafi Yamaghani (MSc student) Induction of cardiac differentiation of mouse adipose tissue-derived stem cells under the effects of relaxin and oxytocin hormones.
- 8. Atefeh Rashidipour (MSc student) Reprogramming of human adipose tissue-derived stem cells using overexpression of OCT4 and reduced expression of p53.
- 9. Reihaneh Afshar Khamseh (MSc student) The effect of miR-146a-induced suppression of CXCR4 on proliferation and invasion of colorectal cancer cells.
- 10. Bita Mirzaei (MSc student) Study the effect of RG108 small molecule on neural differentiation of adipose tissue-derived stem cells.

11. Razieh Asgharian (MSc student) The effects of RG-108 small molecule on adipogenic and osteogenic differentiation of human adipose tissue-derived stem cells.

# Co-Supervisor of PhD/MSc students

- 1. Bahareh Rajaei (PhD. Student) The study of  $\beta$ -like cell programming fate of human induced pluripotent stem cells (hiPSCs) derived from type I diabetic patients by using of signalling molecules.
- 2. Hossein Faghih (PhD. Student) Reprogramming of human ADSC and dermal fibroblast by miR-302 cluster.
- 3. Omolbani Kheirkhah (MSc student) The expression of neuron-specific genes and proteins after differentiation of ADSCs in vitro.
- 4. Mahdi Qasemian Lemraski (MSc student) Developmental neurotoxicity assessment of lead acetate using differentiation of Adipse tissue-derived mesenchymal stem cell to neuron.
- 5. Mohammad Hadi Zarei (MSc student) Developmental neurotoxicity assesment of cholorpyrifose using differentiation of Adipose tissue- derived mesanchymal stem cells to neuron.
- 6. Sanaz Hasani (MSc student) Effect of bone morphogenetic protein-4 (BMP4) on cardiomyocyte differentiation from mouse adipose tissue-derived stem cells.
- 7. Mahsa Borzouyan Dastjerdi (MSc student) Differentiation of iPS cells cultured onto semi-conductive nanofibrous scaffolds into cardiomyocyte cells.
- 8. Paria Motamen Salehi (MSc student) The effects of ES cell extract on the expression of pluripotency markers in human adipose tissue-derived stem cells.

## **WORKSHOPS**

Member of scientific Committee and Lecturer, principles of stem cell culture and biotechnology, National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran, 2014.

**Lecturer, One-day workshop on Stem cell,** National Elites Fundation, Bojnord, Iran, 20 Dec 2012.

Member of scientific Committee and Lecturer, principles of culture and differentiation of embryonic stem cells, National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran, 2012.

Member of scientific Committee and Lecturer, International workshop on stem cell culture principles and perspectives in medical biotechnology, National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran, 25-29 Feb 2012.

**Lecturer**, **Principles of animal cell culture and preservation**, The first workshop on animal cell culture at Sharif University of Technology, Tehran, Iran, 2011.

Lecturer, The Methods of Research. Tehran Azad University, Iran, 2009.

Lecturer, DNA Plasmid construction and Stem Cell delivery systems, weekly scientific seminars of Royan Institute, Iran, 2006.

Lecturer, Study of the Mouse Embryonic Stem Cell Differentiation to Cardiomyocytes and Factors Affecting That *in vitro*, weekly scientific seminars of Royan Institute, Iran, 2004.

**Lecturer and Executive Co-operator,** *The First Retraining of "I.C.U. Instructors",* School of Nursing and Obstetrics, Mashhad University of Medical Sciences, Iran, 2000.

**Lecturer and Executive Co-operator,** *Educational Workshop of Low Back Pain Prevention with Exercise*, Educational-Therapeutic Center of Nadjmieh Hospital, Tehran, Iran, 1998.

### **JOURNAL PUBLICATIONS**

- \* Corresponding author
- **1.** Hasani S, Javeri A, Asadi A, **Taha MF\***. Cardiac Differentiation of Adipose Tissue-Derived Stem Cells is Driven by BMP4 and bFGF but Counteracted by 5-Azacytidine and Valproic Acid. Cell J. 2020.
- 1. Ahmadalizadeh Khanehsar M, Hoseinbeyki M, **Fakhr Taha M**, Javeri A\*. Repression of TGF- $\beta$  Signaling in Breast Cancer Cells by miR-302/367 Cluster. Cell J. 2020 Jan;21(4):444-450.

- 2. Forouzan Jahromi Z, Javeri A\*, **Taha MF\***. Tumor suppressive effects of the pleiotropically acting miR-195 in colorectal cancer cells. EXCLI J. 2019 Apr 9;18:243-252. doi: 10.17179/excli2019-1166.
- 3. Haghi M, **Taha MF**, Javeri A\*. Suppressive effect of exogenous miR-16 and miR-34a on tumorigenesis of breast cancer cells. J Cell Biochem. 2019 Aug;120(8):13342-13353. doi: 10.1002/jcb.28608.
- 4. **Taha MF\***, Javeri A, Karimipour M, Yamaghani MS. Priming with oxytocin and relaxin improves cardiac differentiation of adipose tissue-derived stem cells. J Cell Biochem. 2019 Apr;120(4):5825-5834. doi: 10.1002/jcb.27868.
- 5. Ramezankhani B, **Taha MF**, Javeri A\*. Vitamin C counteracts miR-302/367-induced reprogramming of human breast cancer cells and restores their invasive and proliferative capacity. J Cell Physiol. 2019 Mar;234(3):2672-2682. doi: 10.1002/jcp.27081.
- 6. Farzi-Molan A, Babashah S\*, Bakhshinejad B, Atashi A, **Taha** MF. Down-regulation of the non-coding RNA H19 and its derived miR-675 is concomitant with up-regulation of insulin-like growth factor receptor type 1 during neural-like differentiation of human bone marrow mesenchymal stem cells. Cell Biol Int. 2018 Mar 7. doi: 10.1002/cbin.10960.
- 7. Hasani Lialestani S, Javeri A, Asadi A, **Taha MF\***. Improved cardiac differentiation of human adipose tissue-derived stem cells using a combination of bFGF and BMP4. Research in Medicine: The Quarterly Journal of School of Medicine, Shahid Beheshti University of Medical Sciences 2018, 42(1): 21-27.
- Motamen Salehi P, Foroutan T, Javeri A, Taha MF\*. Extract of mouse embryonic stem cells induces the expression of pluripotency genes in human adipose tissuederived stem cells. Iranian Journal of Basic Medical Sciences 2017; 20 (11), 1200-1206.
- Rashidipour A, Javeri A, Taha MF\*. Study of the exogenous induction of OCT4 and concomitant P53 inhibition on the expression of pluripotency genes in human ADSCs (In Persian). Medical Daneshvar 2017; 133: 27-38.

- 10. Soheilifar MH, Javeri A, Amini H, **Taha MF\***. Generation of dopamine-secreting cells from human adipose tissue-derived stem cells in vitro. 2017 Dec 5. doi: 10.1089/rej.2017.1994.
- 11. Faghih H, Javeri A, **Taha MF\***. Impact of early subcultures on stemness, migration and angiogenic potential of adipose tissue-derived stem cells and their resistance to in vitro ischemic condition. Cytotechnology 2017; 69(6):885-900.. doi: 10.1007/s10616-017-0104-5.
- 12. Maadi H, Moshtaghian A, **Taha MF**, Mowla SJ, Kazeroonian A, Haass NK, Javeri A\*. **(2016)** Multimodal tumor suppression by miR-302 cluster in melanoma and colon cancer. *Int J Biochem Cell Biol.* 2016 Dec;81(Pt A):121-132..
- 13. **Taha MF\***, Javeri A, Majidizadeh T, Valojerdi MR. Both BMP4 and serum have significant roles in differentiation of embryonic stem cells to primitive and definitive endoderm. Cytotechnology 2016; 68(4): 1315-24.
- 14. Zarei MH, Soodi M, Qasemian-Lemraski M, Jafarzadeh E, **Taha MF\***. Study of the chlorpyrifos neurotoxicity using neural differentiation of adipose tissue-derived stem cells. Environ Toxicol 2016 Nov;31(11):1510-1519.
- 15. Qasemian Lemraski M, Soodi M\*, **Taha MF\***, Jafarzade E, Zarei MH. Study of lead-induced neurotoxicity in neural cells differentiated from adipose tissue-derived stem cells. Toxicol Mech Methods. 2015 Feb;25(2):128-35.
- 16. **Taha MF\***, Javeri A\*. The expression of NPPA splice variants during cardiac differentiation of mesenchymal and embryonic stem cells. DNA and cell Biology 2015; 34(1): 19-28.
- 17. Khaleghi M, **Taha MF\***, Javeri A\*, Jafarzadeh N. The effect of BMP4 on cardiac differentiation of adipose tissue-derived stem cells. Biotechnology Letters 2014; 36(12): 2581-9.
- 18. **Taha MF\***, Javeri A, Rohban S, Mowla SJ. Pluripotency features in adipose tissuederived stem cells: the regulatory role of LIF and miR-302. Biomed Res Int 2014: 941486.

- 19. Bahmani L, **Taha MF**, Javeri A\*. Neural differentiation of adipose tissue-derived stem cells is improved following coculture with embryonic stem cells. Neuroscience 2014; 272: 229-239.
- Jafarzadeh N, <u>Taha MF\*</u>, Javeri A, Khaleghi M. Oxytocin improves proliferation and neural differentiation of adipose tissue-derived stem cells. Neuroscience letters 2014; 564: 105-110.
- 21. **Taha MF\***, Javeri A, Omolbani Kheirkhah, Tayebeh Majidzadeh, Alireza Khalatbari Jafari. Neural differentiation of adipose tissue-derived stem cells in KoSR containing media is more efficient than low serum condition. J Biotechnol 2014; 172: 1-10.
- **22.** Javeri A\*, Ghaffarpour M, **Taha MF**, Houshmand M. Downregulation of miR-34a in breast tumors is not associated with either p53 mutations or promoter hypermethylation while it correlates with metastasis. Medical Oncology 2013; 30(1): 413.
- 23. Faghihi S\*, Zia S, **Taha MF\***. Adipose tissue-derived stem cell response to the differently processed 316L stainless steel substrates. Tissue and cell 2012; 44: 365-72.
- **24.** <u>Taha MF\*</u>, Valojerdi MR, Javeri A. Electron Microscopic Study of Mouse Embryonic Stem Cell-derived Cardiomyocytes. Cytotechnology 2011; 64: 197-202.
- 25. **Taha MF\***, Hedayati V. Isolation, identification and multipotential differentiation of mouse adipose tissue-derived stem cells, Tissue and Cell 2010; 42: 211-216.
- 26. <u>Taha MF\*</u>. Cell based-gene delivery approaches for the treatment of neurodegenerative disorders. Current Stem Cell Research and Therapy 2010; 5: 23-36.
- 27. **Taha MF**, Valojerdi MR\*. Effect of Bone Morphogenetic Protein-4 on Cardiac Differentiation from Mouse Embryonic Stem Cells in Serum-free and Low-serum Media. The International Journal of Cardiology 2008; 127: 78-87.
- 28. **Taha MF**, Valojerdi MR\*, Mowla SJ. Effect of Bone Morphogenetic Protein-4 (BMP-4) on Cardiomyocyte Differentiation from Mouse Embryonic Stem Cells. The International Journal of Cardiology 2007; 120: 92-101.

- 29. **Taha MF**, Valojerdi MR\*, Mowla SJ. The Effect of Bone Morphogenetic Protein- 4 (BMP- 4) on Adipocyte Differentiation from the Embryonic Stem Cells in vitro. Anatomia Histologia and Embryologia 2006; 35: 271-278.
- 30. **Taha MF**, Valojerdi MR\*. Quantitative and Qualitative Changes of the Seminiferous Epithelium Induced by Ga. Al. As. (830 nm) Laser Radiation. Lasers in Surgery and Medicine 2004; 34: 352–359.
- 31. **Taha MF**, Valojerdi MR\*, Tiraihi T. Effects of Low Power Ga-Al-As (830 nm) Laser Radiation on Qualitative and Ultrastructural Features of the Seminiferous Epithelium. J Iranian Anat Sci 2003; 1(3): 27-35.
- 32. **Taha MF**, Valojerdi MR\*, Tiraihi T. To Study the Changes of Seminiferous Epithelium after Ga Al As Laser Radiation (830 nm). J Iranian Anat Sci 2003; 1(2): 9-20.

## **CONFERENCE ACTIVITIES**

Session co-chair, 4<sup>th</sup> national and 6<sup>th</sup> international congress of wound and tissue repair, 19-22 Nov 2019. Tehran, Iran.

Session co-chair, 1<sup>st</sup> national congress on application of biomaterials in regenerative medicine, National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran, 5-7 Feb 2014.

Member of Jury Board, 15<sup>th</sup>-18<sup>th</sup> Royan International Research Award, Tehran, Iran, Sep 2014-2019.

Member of Scientific Committee, 19<sup>th</sup>Royan International Research Award, Tehran, Iran, Sep 2019.

Invited speaker, The first National Symposium on Genetics and Stem Cells, Tehran, Iran, 25 Feb 2016.

### PROCEEDINGS OF THE CONFERENCES

- 1. **Taha MF**. Using Mesenchymal Stem Cells to Improve Wound Healing in Acute and Chronic Phases. 4<sup>th</sup> national and 6<sup>th</sup> international congress of wound and tissue repair. 19-22 Nov 2019. Tehran, Iran.
- 2. **Bazargani A, Javeri A, <u>Taha MF</u>**. Anti-tumor effects of METTL3 suppression by shRNA in human melanoma and colorectal cancer cells. *3rd* International & 11th

National Biotechnology Congress of Islamic Republic of Iran. 1-3 Sept 2019. Tehran, Iran.

- 3. **Rezania MA, Javeri A, <u>Taha MF</u>.** The impact of acetylsalicylic acid (Aspirin) on reprogramming of breast cancer cells by miR-302/367 cluster. *3rd* International & 11th National Biotechnology Congress *of Islamic Republic of Iran*. 1-3 Sept 2019. Tehran, Iran.
- 4. Afshar Khamseh R, <u>Taha MF</u>, Javeri A. The role of miR-146a-5p and CXCR4 in tumorigenesis of colorectal cancer cells. *Third International Private Medical Congress of Iran.* 13 March 2019. Tehran, Iran.
- Fghih H, Javeri A, <u>Taha MF</u>. The impact of Mir-302 Cluster on the Expression of Pluripotency feature and dopaminergic differentiation potential of Human Adipose Tissue-derived Stem Cells. 15th Royan Congress on Stem Cell Biology and Technology. Tehran, Iran.
- 6. **Afshar Khamseh R, <u>Taha MF</u>, Javeri A.** The role of miR-146a-5p and CXCR4 in tumorigenesis of colorectal cancer cells. *3th International Personalized Medicine Conference of Iran.* 13-15 Feb 2019, Tehran, Iran.
- 7. **Fghih H, Javeri A, <u>Taha MF</u>**. Dopaminergic induction of human adipose tissuederived stem cells under serum-free and low-serum conditions. *The 3rd National Festival & International Congress on Stem Cell & Regenerative Medicine*. November 28–December 01, 2018, Tehran, Iran.
- Haghi M, Javeri A, <u>Taha MF</u>. MiR-16 and miR-34a collaborate in breast tumor suppression. Nastaran Symposium 2017, November 29-December 1, 2017, Mashad, Iran. *Oral presentation and winner of the 1st poster award*.
- Haghi M, Javeri A, <u>Taha MF</u>. Overexpression of miR-34a and miR-16 synergistically promotes apoptosis in breast cancer cells. 2nd International Tehran Breast Cancer Congress (TBCC9), October 18-20, 2017, Tehran, Iran. Oral presentation.
- 10. Atashkar N, Javeri A, <u>Taha MF</u>. Valproic Acid Reverses The Epithelial to Mesenchymal Transition and Induces Apoptosis in Mir-302/367- Transfected Human Breast Cancer Cells. Cell J (Yakhteh) 2017; 13th Royan Congress on Stem Cell Biology and Technology. Tehran, Iran.

- 11. <u>Taha MF</u>, Rashidipour A, Javeri A. Overexpression of OCT4A and P53 inhibition upregulates the expression of pluripotency markers in adipose tissue-derived stem cells. Cell J (Yakhteh) 2017; *13th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.
- 12. <u>Taha MF</u>, Saghafi Yamaghani M, Javeri A. Oxytocin and Relaxin Synergistically Induce Cardiac Differentiation of Adipose Tissue-derived Stem Cells. Cell J (Yakhteh) 2017; 13th Royan Congress on Stem Cell Biology and Technology. Tehran, Iran.
- 13. **Forouzan Jahromi Z, <u>Taha MF</u>, Javeri A**. miR-195 induces apoptosis and modulates expression of some invasion and angiogenesis genes in human colon cancer. *Cancer Cell Biology, the 2nd IASBS Symposium in Biological Sciences*. November 10-11, 2016, Zanjan, Iran.
- 14. **Ahmadalizadeh Khansar M, Javeri A, <u>Taha MF</u>**. Embryonic Stem Cell-Specific miR-302/367 Cluster Modulates Transforming Growth Factor-β Signaling Pathway in Human Breast Cancer Cells. Cell J (Yakhteh) 2016; *12th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.
- 15. **Faghih H, Javeri A, <u>Taha MF</u>**. The Impact of Early Subcultures on Gene Expression Profile and Resistance to Some Toxic Conditions in Human Adipose Tissue-Derived Stem Cells. Cell J (Yakhteh) 2016; *12th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.
- 16. <u>Taha MF</u>, Javeri A1, Karimipour M. Oxytocin and Relaxin Induces Differentiation of ADSCs to Cardiomyocytes. Cell J (Yakhteh) 2016; 12th Royan Congress on Stem Cell Biology and Technology. Tehran, Iran.
- 17. **Hosseinbeyki M, Javeri A<u>, Taha MF</u>**. MiR-16 augments the effect of miR-302/367 cluster on reprogramming and inhibition of cell cycle in breast cancer cells. 2<sup>nd</sup> International and 14<sup>th</sup> Iranian Genetics Congress. 21-23 May 2016. Tehran, Iran. *Oral presentation and winner of the best poster awards.*
- 18. <u>Taha MF</u>, Hassani S, Javeri A. The Role of bFGF, BMP4 and Noggin in Cardiomyocyte Differentiation of Human Adipose Tissue-derived Stem Cells. Cell J (Yakhteh) 2015; *11th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.
- 19. **Ramezankhani B, Javeri A, <u>Taha MF</u>**. The Role of Ascorbic Acid in Reprogramming of Breast Cancer Cells by miR-302/367 Cluster. Cell J (Yakhteh) 2015; *11th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.

- 20. **Javeri A, <u>Taha MF</u>, Bahmani L.** Co-culture With Embryonic Stem Cells Improves Neural Differentiation of Adipose Tissue-Derived Stem Cells. Cell J (Yakhteh) 2014; *10th Royan Congress on Stem Cell Biology and Technology.* Tehran, Iran.
- 21. **Taha MF**, **Javeri A.** The Expression of NPPA Splice Variants During Cardiac Differentiation of Mouse Mesenchymal and Embryonic Stem Cells. Cell J (Yakhteh) 2014; *10th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.
- 22. **Maadi H, Javeri A, <u>Taha MF.</u>** ES cell-specific miR-302 Reprograms Skin and Colon Cancer Cells, and Modulates Apoptosis, Metastasis and Angiogenesis Markers. Cell J (Yakhteh) 2014; *10th Royan Congress on Stem Cell Biology and Technology.* Tehran, Iran.
- 23. **Rajaei B, Massumi M, <u>Taha MF</u>, Shamsara M.** Generation of Human Induced Pluripotent Stem Cells by Reprogramming of Adult Human Fibroblasts with a Four Transcription Factor, Doxycycline Inducible Lentiviral Transduction System. *12th International Congress of Immunology & Allergy of Iran*, 29th April-2nd May 2014, Milad Tower-Tehran-Iran
- 24. **Rajaei B, Massumi M, Sanati MH, <u>Taha MF</u>, Shamsara M, Movahedi F.** Efficient Programming of Human Induced Pluripotent Stem Cells Derived from Fibroblast of Diabetic Patient to Definitive Endoderm-Like Cells. Cell J (Yakhteh) 2014; *10th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.
- 25. Movahedi F, Rajaei B, Soleimanpour HR, Kabir Salmani M, <u>Taha MF</u>, massumi M. Generation of induced Pluripotent Stem Cells from Iranian typeI Diabetic patients, Fibroblasts using OSKm polycistronic lentiviruses (*Full paper*). 8th national biotechnology congress of I.R. Iran & 4th National Conference on biosecurity, 6-8 Jul 2013, Tehran, Iran.
- 26. **Bahmani L , Javeri A , <u>Taha MF</u>**. Neural Differentiation of Adipose Tissue-Stem Cells Is Improved Following Coculture with Embryonic Stem Cells. Cell J (Yakhteh) 2013; Volume 15, Supplement 1. *9th Royan Congress on Stem Cell Biology and Technology*. Tehran, Iran.
- 27. **Khaleghi M , <u>Taha MF</u>, Javeri A , Jafarzadeh N.** The Effects of Bone Morphogenetic Protein-4 on Cardiomyocyte Differentiation of Mouse. Cell J (Yakhteh) 2013; Volume 15, Supplement 1. 9th Royan Congress on Stem Cell Biology and Technology. Tehran, Iran.

- 28. **Soheilifar MH**, **Taha MF**, **Javeri A**. Transdifferentiation of Human Adipose Tissue-Derived Stem Cells to Dopaminergic Neurons. Cell J (Yakhteh) 2013; Volume 15, Supplement 1. 9th Royan Congress on Stem Cell Biology and Technology; Tehran, Iran.
- 29. **Bahmani L , Javeri A , <u>Taha MF</u>.** ADSCs/ESCs Co-culture: a novel approach to increase the proliferation of ADSCs. *3rd International Student Biotechnology* Congress, 6-8 May 2013; Tehran, Iran.
- 30. **Zahra zamanzadeh**, <u>Taha MF</u>, **Javeri A.** Pluripotency features in adipose tissuederived stem cells. *3rd International Student Biotechnology* Congress, 6-8 May 2013; Tehran, Iran.
- 31. **Qasemian Lemraski M, Soodi M, <u>Taha MF</u>**, **Zarei M, Jafarzadeh E.** Toxicity of lead exposure during different stage of neural cell differentiation of adipose-derived mesenchymal stem cells. *12<sup>th</sup> Iranian congress of toxicology*, 15-17 May 2013.
- 32. **Zarei MH, , Soodi M, <u>Taha MF</u>, Qasemian Lemraski M.** The effect of chlorpyrifos on adipose-derived mesenchymal stem cells during different stages of neuronal cell differentiation. *12<sup>th</sup> Iranian congress of toxicology*, 15-17 May 2013.
- 33. **Jafarzadeh N, <u>Taha MF</u>**, **Javeri A, Khaleghi M.** The effects of oxytocin on neuronal differentiation from mouse adipose tissue-derived stem cells. *The 17th national & 5th International Conference of Biology* 4-6 Sept 2012; Kerman, Iran.
- 34. **Bahmani L, Javeri A, <u>Taha MF</u>**. Retinoic acid promotes neural differentiation of mouse adipose tissue-derived stem cells. *The 17th national & 5th International Conference of Biology* 4-6 Sept 2012; Kerman, Iran.
- 35. **Khaleghi M, <u>Taha MF</u>**, **Javeri A, Jafarzadeh N.** The effects of bone morphogenetic protein-4 (BMP-4) on cardiomyocyte differentiation of mouse adipose tissue-derived stem cells. *The 17th national & 5th International Conference of Biology* 4-6 Sept 2012; Kerman, Iran.
- 36. **Kheirkhah O**, <u>Taha MF</u>, Javeri A, Khalatbari Jafari A. Neural differentiation of adipose tissue-derived stem cells in low-serum media. *First annual conference on neural stem cells* 2011, Tehran, Iran.
- 37. **Zia S, Faghihi S, <u>Taha MF</u>.** In vitro response of adipose tissue-derived stem cell to differently processed 316L stainless steel surfaces. *2<sup>nd</sup> National and 1<sup>st</sup> International*

- Congress on Cellular and Molecular Advances in Non-contagious Diseases 2011; Babol, Iran.
- 38. **Taha MF**, **Hedayati V**. Cardiac differentiation of adipose tissue-derived stem cells in co-culture with mouse cardiomyocytes. *WARM2010* 2010; Moscow, Russia.
- 39. **Taha MF**, **Hedayati V.** Isolation and multipotential differentiation of mouse adipose tissue-derived stem cells. *9th International Congress of Anatomical Sciences of Iran* 2010; Hamedan, Iran.
- 40. **Taha MF, Valojerdi MR.** Regulation of mouse embryonic stem cell differentiation to neuroectodermal lineages by bone morphogenetic protein-4. *International stem cell workshop* 2009; New Castle, United Kingdom.
- 41. **Taha MF, Valojerdi MR, Mowla SJ.** The effect of BMP-4 on mouse embryonic stem cell differentiation to cardiomyocytes in serum-containing media. *7th International Congress of Anatomical Sciences of Iran* 2006; Kashan, Iran.
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## **GENE DISCOVERIES**

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## **RESEARCH INTERESTS**

- Cell biology
- Tissue engineering and regenerative medicine
- Embryonic and adult stem cell research
- · Cardiac and neural differentiation
- · Reprogramming and iPS cell technology

• Gene therapy