

# Curriculum Vitae

## Personal Information

First Name: **Shirin**  
Last name: **Barati**  
Gender: **Female**  
Marital Status: **Single**  
Nationality: **Iranian**  
Email: [Baratishirin@yahoo.com](mailto:Baratishirin@yahoo.com)  
Cell: **+989122643483**

## Educational Background

- ❖ **Ph.D** in Anatomy, School of Medicine, **Iran University** of Medical Sciences, Tehran-Iran, 2015- 2019.

### Thesis:

"The study of bone marrow mesenchymal stem cells transplantation effect on microglial phenotype in cuprizone induced demyelination model in corpus callosum of C57BL/6 mouse."

Supervisor: **Dr Mohammad Taghi Joghataei**

- ❖ **MSc** in Anatomy, School of Medicine, **Tarbiat Modares University** of Medical Sciences, Tehran, Iran, 2013-2015.

### Thesis:

"Protective effects of calligonum comosum on in vitro viability, proliferation and colonization of spermatogonial cells"

Supervisor: **Dr Mansoureh Movahedin**

- ❖ **BSc in Radiology**, School of Paramedical, **Shahid Beheshti University** of Medical Science, Tehran- Iran, 2008-2012.

## **Work Experience**

Anatomy Research Center, Tarbiat Modares university of Medical Sciences, Tehran-Iran, 2013-2014.

Cellular and Molecular Research Center, Iran university of Medical Sciences, Tehran-Iran, 2015-2018.

## **Research Interests**

Brain disorders specially cellular and molecular aspects

Neuroscience field

Cell Therapy

Reproductive field

## **Membership**

International Brain Research Organization (IBRO)

Iranian Neuroscience Society (INSS)

Iranian Anatomy Society (IAS)

## **Workshop**

1. As Mentorship of "Bone marrow mesenchymal Stem Cells Culture Workshop" in Iran university of medical science, 2017, Tehran, Iran.

2. As Participant in "Acute traumatic and chronic brain disorders ". 2016, Iran university of medical science, Tehran, Iran.

3. As Mentorship of "Spermatogonial Stem Cells Culture Workshop" in Tarbiat Modares university of medical science, 2015, Tehran, Iran.

4. As Participant in "Sperm Preparation, Oocyte Culture and IVF Technique ". 2014, Yazd, Iran.

5. As Participant in "Sperm isolation, count and viability". 2014, Yazd, Iran.

6. As Participant in "The technique of protein tracing in cancer tissues by using immunohistochemistry". 2014, Yazd, Iran.

## Skills

- ✓ Cell Culture
- ✓ Multiple Sclerosis Model Induction (cuprizone model)
- ✓ PCO Model Induction
- ✓ Molecular techniques: real time PCR
- ✓ Tissue preparation
- ✓ Tissue specific stainings
- ✓ Flowcytometry
- ✓ Set up IHC and MTT
- ✓ Statistical Analysis Software (excel, Graph Pad Prism, Image J, SPSS software).

## Teaching Experiences

- ✓ Neuroanatomy, Medical Students, Iran University of Medical Sciences, Tehran-Iran.
- ✓ Anatomy, Medical Students, Iran University of Medical Sciences, Tehran-Iran.
- ✓ Histology, Medical Students, Iran University of Medical Sciences, Tehran-Iran.

## Present projects

- ✓ The effect of mesenchymal stem cell transplantation on the astrocyte phenotype
- ✓ The role of microglial ablation on remyelination in cuprizone model
- ✓ The compared evaluation of stem cell condition medium injection and MSCs transplantation on the pro-inflammatory factors in neurodegenerative diseases

## Publications

1. **Shirin Barati**, Fatemeh Tahmasebi, Faeze Faghihi. Effects of mesenchymal stem cells transplantation on multiple sclerosis patients. *Neuropeptides Journal*. 2020. **IF:2.411**
2. Fatemeh Tahmasebi, Parichehr Pasbakhsh, **Shirin Barati**, Soheila Madadi, Iraj Ragerdi Kashani. The effect of microglial ablation and mesenchymal stem cell transplantation on a cuprizone-induced demyelination model. *Journal of cellular physiology*. 2020. **IF:5.546**
3. **Shirin Barati**, Iraj Ragerdi Kashani, Fateme Moradi, Fatemeh Tahmasebi, Soraya Mehrabi, Mahmood Barati, Mohammad Taghi Joghataei. Mesenchymal stem cell mediated effects on microglial phenotype in cuprizone-induced demyelination model. *Journal of cellular biochemistry*. 2019. **IF:4.237**
4. **Shirin Barati**, Iraj Ragerdi Kashani, Fatemeh Tahmasebi, Soraya Mehrabi, Mohammad Taghi Joghataei. Effect of mesenchymal stem cells on glial cells population in cuprizone induced demyelination model. *Neuropeptides Journal*. 2019. **IF:2.411**

5. Fatemeh Tahmasebi, Parichehr Pasbakhsh, Keywan Mortezaee, Soheila Madadi, **Shirin Barati** and Iraj Ragerdi Kashani. Effect of the CSF1R inhibitor PLX3397 on remyelination of corpus callosum in a cuprizone-induced demyelination mouse model. Journal of cellular biochemistry. 2019. **IF:4.237**
6. **Barati Shirin**, Movahedin Mansoureh, Batooli Hossein. In vitro antiapoptotic effects of the calligonum extract on spermatogonial stem cells. International Journal of Reproductive Biomedicine. 2018. **IF:1.1**
7. Soraya Mehrabi, Farinaz Nasirinezhad, Mahmood Barati, Nahid Abutaleb, **Shirin Barati**, Masoud Mozafari<sup>5</sup>. Recent Patents on Biotechnology. The effect of Alpha-Tocopherol on morphine tolerance-induced expression of c-fos Proto-oncogene from a biotechnological perspective. 2018. **IF:0.83**
8. **Barati Shirin**, Movahedin Mansoureh, Mazaheri Zohreh, Batooli Hossein, Tahmasebi Fatemeh. Establishment of Oxidative Stress Modeling during Spermatogonial Stem Cells Cultivation Treated with Different Doses of H<sub>2</sub>O<sub>2</sub>. Anatomical Sciences Journal. 2015.
9. Tahmasebi Fatemeh, **Barati Shirin**, Mazaheri Zohreh. Case Report: Unilateral Incompletely Duplicated Ureter without any Accessory Renal Artery. Anatomical Sciences Journal. 2015.

## Under Revision

1. **Shirin Barati**, Fatemeh Tahmasebi, Iraj Ragerdi Kashani. Effect of CSF1R inhibitor on glial cells population in cuprizone model. Journal of cellular physiology.
2. **Shirin Barati**. Effect of MSCs transplantation on A1 neurotoxic astrocytes in cuprizone model. Journal of cellular biochemistry.

## Congress/Workshops

- 1- Shirin Barati. "Effects of bone marrow mesenchymal stem cell transplantation on microglial phenotype in cuprizone induced demyelination model". 13<sup>th</sup> National Congress of Anatomical Science. 2018, Hamedan, Iran, (oral Presentation).
- 2- Shirin Barati. "Effect of calligonum extract on spermatogonial stem cells proliferation and colonization in culture". 12<sup>th</sup> Iranian Congress of Anatomical Science. 2016, Tehran, Iran, (oral Presentation).
- 3- Shirin Barati. "Human brain development and evolution from primate". 12<sup>th</sup> Iranian Congress of Anatomical Science. 2016, Tehran, Iran, (Poster Presentation).

- 4- Shirin Barati. "Evaluation of the Protective Effects of Calligonum Extract on Spermatogonial Stem Cells Viability in Culture". 2<sup>nd</sup> International Congress on Reproduction. 2016, Tehran, Iran, (Poster Presentation).
- 5- Shirin Barati. "Anatomical Variation in Branches of Celiac Trunk". 11<sup>th</sup> Iranian Congress of Anatomical Science. 2014, Ahvaz, Iran, (Poster Presentation).
- 6- Shirin Barati. "Unilateral Duplicated Ureter without any Accessory Renal Artery". 11<sup>th</sup> Iranian Congress of Anatomical Science. 2014, Ahvaz, Iran, (Poster Presentation).
- 7- Shirin Barati. "Establishment of Oxidative Stress Modeling during Spermatogonial Stem Cells Cultivation Treated with Different Doses of H<sub>2</sub>O<sub>2</sub>". 20<sup>th</sup> Iranian Society for Reproductive Med. Congress. 2014, Isfahan, Iran, (Oral Presentation).