

## CURRICULUM VITAE

### Mahsa Kazemi Shalkouhi

#### Personal Information

First Name: Mahsa  
Surname: Kazemi  
Date of Birth: April 8, 1983  
Place of Birth: Rasht-Iran  
Gender: Female  
Marital Status: Single  
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#### Contact Information

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#### Work Experience

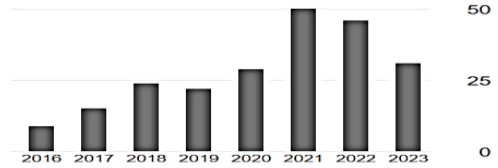
2019-till now

#### **Clinical Embryologist**

IVF Center, Ayatollah Taleghani Hospital, Shahid Beheshti  
University of Medical Sciences

#### Cited by

	All	Since 2018
Citations	227	202
h-index	10	9
i10-index	10	9



## **Education**

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### **2014-2019 Ph.D in Reproductive Biology**

Department of Anatomical Sciences and Reproductive Biology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran. ([www.sbm.ac.ir](http://www.sbm.ac.ir))

#### **Thesis Title**

Role of trophoblastic HLA-G1 expression in BeWo cell line on regulating endometrial stromal cell migration

#### **Thesis Advisors**

Dr. Mohammad Hasan Heidari, Professor in Anatomical Sciences

Dr. Vahid Jajarmi , Assistant professor in medical biotechnology

### **2010-2013 M.Sc in medical physiology**

Department of Physiology and Pharmacology, School of Medicine, Zamjan University of Medical Sciences, Zanzan, Iran ([www.zums.ac.ir](http://www.zums.ac.ir))

#### **Thesis Title**

The effects of chronic treatment with melatonin on hippocampal pathomorphological changes in pilocarpin induced status epilepticus

#### **Thesis Advisor**

Dr. Saeed Shokri, Assistant professor in Anatomical Sciences

### **2003-2007 B.Sc in Biology minor in Zoology**

School of Basic Sciences, Guilan University, Rasht, Guilan, Iran. ([www.guilan.ac.ir](http://www.guilan.ac.ir))

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### **Workshops /Congress Attendance**

<b>2022</b>	Practical professional short-term course on karyotype analysis
<b>2018</b>	Workshop on CRISPR/CAS9 basic and advance by 14 <sup>th</sup> international congress of immunology and allergy
<b>2017</b>	17 <sup>th</sup> Royan International Twin Congress on Reproductive Biomedicine
<b>2016</b>	Theoretical and practical workshop on endometrium immunomodulation for repeated implantation failure
<b>2016</b>	12 <sup>th</sup> Iranian congress on anatomical sciences
<b>2015</b>	Workshop on in vitro maturation of human ovary tissue post thawing
<b>2015</b>	Workshop on vitrification of human ovary tissue
<b>2014</b>	14 <sup>th</sup> International Congress of Obstetrics and Gynecology
<b>2014</b>	20 <sup>th</sup> congress on infertility and reproduction
<b>2014</b>	Royan International Twin Congress on Reproductive Biomedicine
<b>2014</b>	One day pre congress course on “How to write a paper”
<b>2012</b>	workshop of Research skills
<b>2012</b>	Basic and clinical neuroscience congress
<b>2012</b>	Royan International Twin Congress on Reproductive Biomedicine
<b>2011</b>	Workshop of endnote and reference manager
<b>2010</b>	workshop of Basic research method
<b>2010</b>	workshop of Working with laboratory animals

### **Honors**

<b>2011</b>	Top (First) Student in M.Sc., a Plaque for Excellence Presented by the Chancellor of Zanjan University of Medical Sciences, Zanjan, Iran
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## **Practical Experiments:**

### **Clinical Experiments**

#### **1 Andrology Laboratory**

- Diagnostic semen analysis
- Therapeutic semen processing
- TESE processing
- Sperm and TESE sample cryopreservation
- DFI measurement
- Phospholipase C zeta (PLC $\zeta$ ) measurement
- IUI sex selection

#### **2 Embryology Laboratory**

- Oocyte pick up, denudation and handling
- Microinjection (ICSI), Embryo biopsy
- Embryo transfer
- Oocytes and embryo vitrification and thawing

### **Laboratory Experiments**

#### **1 Histological Techniques**

- Tissue fixation, processing and slicing with microtome
- Lower than 200  $\mu$ m sample fixation, processing and slicing with microtome
- Timm, H&E and Nissl

#### **2 Antibody Based Techniques**

- Immunohistochemistry (IHC)
- Immunofluorescent (ICC)
- Western Blotting

#### **3**

##### **Animal Models**

- Temporal lobe epilepsy
- Diabetic rat
- PCOS

#### **4 IVF and parthenogenesis in mice**

#### **5 Molecular Techniques and Techniques of Biotechnology**

- Primer design (Q- RT-PCR)
- Quantitative RT-PCR
- T/A Cloning and gene cloning (pcDNA, pEGFP-N1)
- Experience in transfection of resistant cell lines (PC12)
- Virus packaging (pWPXLd), Transduction
- Experience in gRNA design of CRISPR/CAS9 system

#### **4 Cell culture**

- primary (Uterine stromal cell, dental pulp)
- cell lines (choriocarcinomas, MCF7, HEK293, PC12, ISHIKAWA)

#### **5 Image J software Semi quantitative analysis**

- Color densitometry and Immunofluorescent analysis
- Band analysis of RT-PCR and western blot

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**Thesis advisor**

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**Teaching Experiences**

<b>2019-2020 (6 month)</b>	Assistant embryologist at the Infertility Center of Taleghani Hospital, Shahid Beheshti University of Medical Sciences, Tehran-Iran.
<b>2018-2019 (6 month)</b>	Embryology internship at the Infertility Center of Taleghani Hospital, Shahid Beheshti University of Medical Sciences
<b>2019-2020 (1 Semester)</b>	Teaching Associate of laboratory techniques course, Department of Anatomical Sciences and Reproductive Biology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran-Iran.
<b>2018-2019 (2 Semesters)</b>	Teaching Associate of practical IVF, Department of Anatomical Sciences and Reproductive Biology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran-Iran.
<b>2018-2019 (In English, 1 Semester)</b>	Medical biosafety to international student of laboratory sciences, School of Allied Medical Sciences, Tehran University of Medical Sciences, Tehran, Iran
<b>2018-2019 (In English, 1 Semester) (In Farsi, 2 Semesters)</b>	Theoretical and practical medical histology to international student of laboratory sciences, School of Allied Medical Sciences, Tehran University of Medical Sciences, Tehran, Iran
<b>2010-2013 (2 Semesters)</b>	Medical Physiology to paramedical students as a Graduate Teaching Associate, Department of Physiology and Pharmacology, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran (ZUMS)

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## **Bibliography**

- 1** 2014, *Andrologia*  
Melatonin protects testes against lithium pilocarpine-induced temporal lobe epilepsy in rats: a time course study.  
Saeed Shokri\*, **Mahsa Kazemi\***, Masoud hemadi, Ardeshir Moaiery, Maiam Arab-Firoozjaei, Mahin Gankhani, Reza Nejatbakhsh; *Andrologia*. 2014 Mar 30.  
**(\*second correspondence Author)**
  - 2** Jul 2015, *Cell Journal*  
Effects of Wi-Fi (2.45 GHz) Exposure on Apoptosis, Sperm Parameters and Testicular Histomorphometry in Rats: A Time Course Study  
Saeed Shokri, Aiob Soltani, **M. Kazemi,** [...], Farshid Babapoor Mofrad
  - 3** Mar 2016, *Anatomy & cell biology*  
Modulation of axonal sprouting along rostro-caudal axis of dorsal hippocampus and neuronal survival in parahippocampal cortices by long-term post-lesion melatonin administration in lithium-pilocarpine model of temporal lobe epilepsy  
**M. Kazemi,** Saeed Shokri, Mahin Ganjkhani, [...], Iraj Jafari Anarkooli
  - 4** Oct 2016, *Cell Journal*  
Ameliorating Effect of Ginseng on Epididymo-Orchitis Inducing Alterations in Sperm Quality and Spermatogenic Cells Apoptosis following Infection by Uropathogenic Escherichia coli in Rats  
Mehdi Eskandari, Soghra Jani, **M. Kazemi,** Habib Zeiyghami<sup>3</sup>, Alireza Yazdinezhad<sup>4</sup>, Sahar Mazloomi, Saeed Shokri
  - 5** May 2016, *Andrologia*  
Co-administration of ginseng and ciprofloxacin ameliorates epididymo-orchitis induced alterations in sperm quality and spermatogenic cells apoptosis following infection in rats  
M. Eskandari, A. Ghalyanchi Langeroudi, H. Zeiyghami, **M. Kazemi,** [...] Saeed Shokri
  - 6** Oct 2017, *Andrologia*.  
Ameliorating effects of fennel and cumin extracts on sperm quality and spermatogenic cells apoptosis by inducing weight loss and reducing leptin concentration in diet-induced obese rats.  
Nejatbakhsh R<sup>1</sup>, Riyahi S<sup>2</sup>, Farrokhi A<sup>1</sup>, Rostamkhani S<sup>2</sup>, Mahmazi S<sup>2</sup>, Yazdinezhad A<sup>3</sup>, **Kazemi M**<sup>4</sup>, Shokri S<sup>1</sup>
  - 7** Jul 2018, *Cell Journal*
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Testosterone Reduces Spinal Cord Injury-Induced Effects on Male Reproduction by Preventing CADM1 Defect

Hamid Choobineh, **M. Kazemi**, Mohammad Ali Sadighi Gilani, Gholamreza Hassanzadeh

**8** August 2019, Lasers in Medical Science

Improvement in viability and mineralization of osteoporotic bone marrow mesenchymal stem cell through combined application of photobiomodulation therapy and oxytocin

Somaye Fallahnezhad, Vahid Jajarmi, Sarira Shahnava. Abdullah Amini, Seyed Kamran Ghoreishi. **M. Kazemi**, Sufan Chien, Mohammad Bayat

**9** *May 2019, Journal of Cellular Biochemistry*

Impaired spermatogenesis associated with changes in spatial arrangement of Sertoli and spermatogonial cells following induced diabetes

Ensieh Sajadi, Sara Dadras, Mohammad Bayat, Shabnam Abdi, Hamid Nazarian, Sanaz Ziaeipour, Fatemeh Mazini, **M. Kazemi**, Seyed Mohammad Bagheri, Aida Valizadeh, mohammad-amin Abdollahifar

**10** *October 2019, Photobiomodulation, Photomedicine, and Laser Surgery*

Impact of Photobiomodulation and Condition Medium on Mast Cell Counts, Degranulation, and Wound Strength in Infected Skin Wound Healing of Diabetic Rats

Reza Kouhkeheil, Mohammadjavad Fridoni, Mohammad-Amin Abdollahifar, Abdollah Amini, Sahar Bayat, Seyed Kamran Ghoreishi, Sufan Chien, **M. Kazemi**, Mohammad Bayat

**11** *April 2020, Photobiomodulation, Photomedicine, and Laser Surgery*

Photobiomodulation with 810 nm Wavelengths Improves Human Sperms' Motility and Viability *In Vitro*

Fereshteh Safian, Marefat Ghaffari Novin, Maryam Karimi, **Mahsa Kazemi**, Fateme Zare, Seyed Kamran Ghoreishi and Mohammad Bayat

**12** *April 2020, Crescent Journal of Medical and Biological Sciences*

Practical Approaches to Improve the Sensitivity of Volume-Based Cellular Enumeration of the BeWo Cell Line-Derived Spheroids as an *In Vitro* Embryo Model: MTT Versus Neutral Red Uptake Assays

**Mahsa Kazemi**, Vahid Jajarmi, Hamid Nazarian, Marefat Ghaffari Novin, Saghar Salehpour, Hamid Choobineh, Zahra Shams Mofarahe, Mohammad Hasan Heidari

**13** 2021/2, Cryobiology

Photobiomodulation preconditioned human semen protects sperm cells against detrimental effects of cryopreservation

Fereshteh Safian, Marefat Ghaffari Novin, Hamid Nazarian, Zahra Shams Mofarahe, Mohammad-Amin Abdollahifar, Vahid Jajarmi, Sareh Karimi, **Mahsa Kazemi**, Sufan Chien, Mohammad Bayat

- 14** 2021, Analyst  
Cross flow coupled with inertial focusing for separation of human sperm cells from semen and simulated TESE samples  
Amid Rahi, **Mahsa Kazemi**, Esmail Pishbin, Sareh Karimi, Hamid Nazarian
- 15** April 2021, Journal of Cellular Biochemistry  
Culture strategy as a modulator of target assessments: Functionality of suspension versus hanging drop-derived choriocarcinoma spheroids as in vitro model of embryo implantation  
**Mahsa Kazemi**, Vahid Jajarmi, Hamid Nazarian, Marefat Ghaffari Novin, Saghar Salehpour, Abbas Piryaei, Heidar Heidari Khoei, Hamid Choobineh, Mohammad Amin Abdollahifar, Mostafa Haji Molla Hoseini, Mohammad Hasan Heidari
- 16** 2022/5, journal of Reproductive Sciences  
[Comparative Effect of Photobiomodulation on Human Semen Samples Pre-and Post-Cryopreservation](#)  
Fereshteh Safian, Mohammad Bayat, Vahid Jajarmi, Mohammad-Amin Abdollahifar, Hamid Nazarian, Zahra Shams Mofarahe, Mahsa Ghaffari Novin, **Mahsa Kazemi**, Pourya Raei, Sufan Chien, Marefat Ghaffari Novin
- 17** 2022/12, Iranian Journal of Pharmaceutical Research: IJPR  
[Identifying Key Lysosome-Related Genes Associated with Drug-Resistant Breast Cancer Using Computational and Systems Biology Approach](#)  
Aref Shiralipour, Babak Khorsand, Leila Jafari, Mohammad Salehi, **Mahsa Kazemi**, Javad Zahiri, Vahid Jajarmi, Bahram Kazemi
- 18** 2023/10/1, International Journal of Fertility and Sterility  
[The Effect of SARS-Cov2 Infection on The Spermogram: A Prospective Study](#)  
Farzad Allameh, **Mahsa Kazemi**, Mehrnaz Ajorlou, Saeed Soroush, Behzad Narouie, Alireza Fatemi, Mehdi Dadpour
- 19** August 2023, Heliyon  
[Nanowarming improves survival of vitrified ovarian tissue and follicular development in a sheep model](#)  
Sareh Karimi, Seyed Nasrollah Tabatabaei, Marefat Ghaffari Novin, **Mahsa Kazemi**, Zahra Shams Mofarahe, Alireza Ebrahimzadeh-Bideskan,

### **Papers Under submission**

1. Higher incidence of COH cycles with SER cluster positive oocytes in PCOS patients

### **Running Title Preparing**



1. Role of trophoblastic HLA-G1 expression in BeWo cell line on regulating endometrial-spheroid cross talks (under progress)

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### **Symposia Presentations**

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|------|--|
| 2012 | Protective effects of melatonin on the testis in post status epilepticus rats following lithium-Pilocarpin injection: as a model of temporal lobe epilepsy.<br><i>Royan International Twin Congress. September. 2012. Thran.Iran</i> |
| 2012 | Post SE treatment with melatonin is effective in subsiding post lesion epileptogenesis in Lithium-Pilocarpin model of TLE.<br><i>Basic and Clinical Neuroscience Congress. Tehran. Iran</i>  |

### **Professional Membership**

2014-present Iranian Society of Embryology and Reproductive Biology

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### **References:**

- |   |  |
|---|--|
| 1 | Dr. Marefat Ghaffari Novin<br><a href="mailto:mghaffarin@yahoo.com">mghaffarin@yahoo.com</a>   |
| 2 | Dr. Hamid Nazarian<br><a href="mailto:hamid.nazarian@gmail.com">hamid.nazarian@gmail.com</a>   |
| 3 | Dr. Vahid Jajarmi<br><a href="mailto:V.jajarmi@gmail.com">V.jajarmi@gmail.com</a><br><a href="mailto:V.jajarmi@sbmu.ac.ir">V.jajarmi@sbmu.ac.ir</a>    |
| 4 | Dr. Mohammad Bayat<br><a href="mailto:mohbayat@sbmu.ac.ir">mohbayat@sbmu.ac.ir</a><br><a href="mailto:bayatenator@gmail.com">bayatenator@gmail.com</a> |
| 5 | Dr. Abbas piryae<br><a href="mailto:piryae@sbmu.ac.ir">piryae@sbmu.ac.ir</a><br><a href="mailto:piryae_a@yahoo.com">piryae_a@yahoo.com</a>             |