Curriculum Vitae

Sepideh Ashouri Movassagh

Assistant Professor of Reproductive Biology

Human and Animal Cell Bank, Iranian Biological Resource Center.

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Educational Background:

Ph.D of Reproductive Biology (2014-2019)

Tehran University of Medical Sciences, Tehran, Iran.

• Thesis & Research Dissertation: The investigation of human spermatogonial cells differentiation on 3D scaffold of acellular sheep testis.

Supervisors: Dr. M. Abbassi, Dr. G. Pourmand

Dr of Veterinary Medicine (2001-2007)

University of Tehran, Tehran, Iran.

• Thesis & Research Dissertation: The Study of behavior of listeria monocytogenes through the manufacture process of feta cheese.

Supervisors: Dr. A. Akhondzadeh

Work Experiences:

- **Researcher,** *Iranian Biological Resource Center (IBRC) (2009-present).*
- Embryologist, Shariati Hospital, Imam Khomeini Hospital (1 year).

Teaching Experiences:

- Workshop on Methods of working with laboratory animals, *Iranian Biological Resource Center (IBRC)*, *Tehran (2009-present)*.
- Workshop on Fundamentals of Cell Culture, Iranian Biological Resource Center (IBRC), Tehran (2010-present).

- Workshop on Detection of Mycoplasma Contamination in Cell Culture, Iranian Biological Resource Center (IBRC), Tehran (2011-present).
- Training Course of Advanced Cell Culture, Iranian Biological Resource Center (IBRC), Tehran (2011-present).
- Training Course of Principles of Animal Cell Culture, Iranian Biological Resource Center (IBRC), Tehran (2011-present).
- Training Course of Cell banking, Iranian Biological Resource Center (IBRC), Tehran (2011-present).
- Training Course of Good Cell Culture and Banking Practice, Iranian Biological Resource Center (IBRC), Tehran (2011-present).
- Workshop of GCCP & Global Cell Culture Problem: Mycoplasma Contamination, 14th International Congress of Immunology & Allergy, Tehran (April 2018).
- Workshop of Human and Animal Cell Culture, 14th International Congress of Immunology & Allergy, Tehran (April 2018).
- Workshop of Primary Cell Culture: Mesenchymal Stem Cell Isolation and Culture, 14th International Congress of Immunology & Allergy, Tehran (April 2018).
- The Fourth USERN Laboratory Techniques School, USERN International Scientific Education & Research Network, Tehran (February 5-22 2023).

Publications:

- 1) <u>Movassagh SA</u>, Dehkordi MB, Koruji M, Pourmand G, Farzaneh P, Movassagh SA, et al. In Vitro Spermatogenesis by Three-dimensional Culture of Spermatogonial Stem Cells on Decellularized Testicular Matrix. Galen Medical Journal. 2019;8:1565.
- 2) Ashouri Movassagh, S; Feraghat, S; Farghadan, M; Ashouri Movassagh, S. Isolation, Culture and Differentiation of human Spermatogonial Stem Cells into differentiated germ cells, osteoblasts and adipocytes. Razi Journal of Medical Sciences, 2019;8:1565
- 3) Talebi A, Gilani MAS, Koruji M, Ai J, Navid S, <u>Sepideh Ashouri Movassagh</u>, Rezaie MJ, et al. Proliferation and Differentiation of Mouse Spermatogonial Stem Cells on a Three-Dimensional Surface Composed of PCL/Gel Nanofibers. International Journal of Morphology. 2019;37(3).

- 4) Gholami K, Pourmand G, Koruji M, <u>Ashouri S</u>, Abbasi M. Organ culture of seminiferous tubules using a modified soft agar culture system. Stem cell research & therapy. 2018
- 5) <u>Ashouri Movassagh S</u>. Effects of different insulin concentrations on in vitro maturation of bovine oocyte in the presence and absence of cumulus cells 2018.
- 6) Amoli, A.D., Mohebali, N., Farzaneh, P., Shahzadeh-Fazeli, SA., Nikfarjam, L., <u>Ashouri Movassagh S.</u>, Moradmand, Z., Ganjibakhsh, M., Nasimian, A., Izadpanah, M; Vakhshiteh, F., Gohari, N; Masoudi, N; Farghadan, M; et al. *Establishment and characterization of Caspian horse fibroblast cell bank in Iran*. In Vitro Cellular & Developmental Biology-Animal, 2017; 53 (4): 337-343.
- 7) Ganjibakhsh M, Aminishakib P, Farzaneh P, Karimi A, Sepideh Ashouri, Fazeli SAS, Rajabi M, et al. Establishment and characterization of primary cultures from iranian oral squamous cell carcinoma patients by enzymatic method and explant culture. Journal of dentistry (Tehran, Iran). 2017;14(4):191.
- 8) Ganji M, fazeli A, gohari N, rahmati H, elyasi Z, <u>Ashouri Movassagh S</u>, izadpanah M, et al . Isolation, characterization and standard storage of human mesenchymal stem cell derived from adipose and dental pulp tissue. RJMS. 2017; 24 (157):35-50
- 9) Noroozi, K; Kallbassi, M; Farzaneh, P; Shahzadeh-Fazeli, SA; Ashouri Movassagh S., Farghadan, M; et al. Establishment and characterization of epithelial-like cell line from Caspian trout (Salmo trutta caspius) fin tissues. Aquatic Physiology and Biotechnology, 2014; 2(3):69-88.
- 10) Asadi, M., Ganjibakhsh, M., Aghdam, S.M., Izadpanah, M., Moghanjoghi, S.M., Gorji, Z.E., Rahmati, H., Amoli, A.D., <u>Movassagh, S.A.</u>, Fazeli, S.A.S., 2020. Establishment and Preservation of Lymphoblastoid Cell Lines from Fresh and Frozen Whole Blood and Mononuclear Cells. In vitro cellular & developmental biology. Animal.
- 11) Jabari, A., Gilani, M.A.S., Koruji, M., Gholami, K., Mohsenzadeh, M., Khadivi, F., Gashti, N.G., Nikmahzar, A., Mojaverrostami, S., <u>Ashouri Movassagh S</u>., Talebi, A., 2020. Three-dimensional co-culture of human spermatogonial stem cells with Sertoli cells in soft agar culture system supplemented by growth factors and Laminin. Acta Histochemica 122(5), 151572.

- 12) Khadivi F, Koruji M, Akbari M, Jabari A, Talebi A, <u>Movassagh SA</u>, et al. Application of platelet-rich plasma (PRP) improves self-renewal of human spermatogonial stem cells in two-dimensional and three-dimensional culture systems. Acta histochemica. 2020;122(8):151627
- 13) Movassagh SA, Movassagh SA, Dehkordi MB, Pourmand G, Gholami K, Talebi A, et al. Isolation, identification and differentiation of human spermatogonial cells on three-dimensional decellularized sheep testis. Acta Histochemica. 2020;122(8):151623
- 14) Movassagh SA, Movassagh SA. Effect of 3D substrate obtained from decellularized tissue of rat testis on the differentiation of mouse spermatogonial cells. Research in Medicine. 2022; Vol. 46; No. 2
- 15) Jabari A, Gholami K, Khadivi F, Koruji M, Amidi F, <u>Ashouri S</u>, et al. In vitro complete differentiation of human spermatogonial stem cells to morphologic spermatozoa using a hybrid hydrogel of agarose and laminin. International Journal of Biological Macromolecules. 2023:123801.

Lectured Articles & Posters in Congress:

- 1) Ashouri. S; Farzaneh. P; Shahzadeh Fazeli, S.A. Role of Gene Banks in Conservation of Animal Biodiversity and Genetics: Experiences of Iranian Biological Resource Center (IBRC). National Biotechnology Congress of Islamic Republic of Iran 2011.
- 2) <u>Ashouri. S:</u> Farzaneh. P; Shahzadeh Fazeli, S.A. *Bank production of somatic cells from Iranian native animals*. Experiences of Iranian Biological Resource Center (IBRC). National Iranian Biological Resource Center (IBRC) 2011.
- 3) <u>Ashouri. S</u>; Farzaneh. P; Shahzadeh Fazeli, S.A. *Achievement of Sheep Fibroblast Cells to Conserve Genetic Resources in Iran*. Experiences of Iranian Biological Resource Center (IBRC). Congress of Iranian Genetics 2012.
- 4) Ashouri. S; Isolation and culture of human and mouse spermatogonial stem cells and their differentiation into osteoblasts and adipocytes. Experiences of Iranian Biological Resource Center (IBRC). National Congress on veterinary basic sciences 2019.

- 5) <u>Ashouri. S</u>; Evaluation of human spermatogonia stem cell differentiation on decellularized testicular tissue. Experiences of Iranian Biological Resource Center (IBRC). Royan International Congress of Reproductive Biomedicine 2022.
- 6) Movassagh SA, Movassagh SA, Farghadan M, Asadi M, Ganjibakhsh M, Aghdam SM, et al., editors. *Cryopreservation of testicular tissue and cells in human and animal species and check the quality of samples after recovery*. Tissue engineering part a; 2022: Mary Ann Liebert, Inc. 140 Huguenot street, 3rd FL, New Rochelle, NY 10801 USA.
- 7) <u>Ashouri. S</u>; Cell Culture and Cryopreservation of Sexual Tissues of three Iranian leopard Cheetahs. Experiences of Iranian Biological Resource Center (IBRC). Royan International Congress of Reproductive Biomedicine 2023.

Research Projects:

- ❖ <u>Project Manager</u>, Department of Anatomy, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran:
 - 1) The investigation of human spermatogonial cells differentiation using the three-dimensional soft agar culture system.
- ❖ Project Manager, Iranian Biological Resource Center, Tehran, Iran:
 - 1) Collect collections of testicular tissue and primary cells extracted from it in humans and mammals
- ❖ Research Assistant, Iranian Biological Resource Center, Tehran, Iran:
 - 1) Establishment of in vitro genotoxicity assays of chemicals in accordance with international standards and the codification of operating procederes
 - 2) Establishment of ten Oral Scuamous Carcinoma cell lines and evaluation of anti proliferative effect of Aflibercept

- 3) Establishment of ten Oral Squamous Carcinoma cell lines and evaluation of anti proliferative effect of Bevacizumab.
- 4) Establishment of Lymphoblastoid collection from Multiple Sclerosis patients
- 5) Establishment of dental pulp stem cells collection for research application.
- 6) Establishment of somatic cell collection of two hump camel (Camelus Bactrianus) for the genetic conservation purpose in Iran
- 7) Establishment of Primary culture from Salmo trutta caspius
- 8) Authentication of 20 Human Mesenchymal Cell line
- Part 1:Production of lymphoblastoid cell line resources from Iranian ethnic groups .
 Fars, Tork, Lor and Arab ethnicity
- 10) Establishment Cell line & Gene bank of Caspian horse for registration and conservation of Iranian Animal Resources
- 11) Establishment of a set of lymphoblastoid lines from carriers and patients with thalassemia
- 12) Comparsion of Different methods for establishment of lymphoblastoid cells
- 13) Establishment of cell bank for domestic animals of extinction for the genetic conservation purpose in Iran.

Certificates of Courses or Workshops

Title and Organization or institution	Year(s)
International Symposium Veterinary Surgery	2005
Methods of working with Nude Mouse in Tehran University of Medical Sciences workshop	2008
Application of molecular methods in medical diagnostic laboratories in the Iranian Biological Center workshop	2009
National Congress on Biological and Genetic Resources	2010
Working with all kinds of microscopes in the Iranian Biological Center workshop	2010

International Veterinary Poultry Congress	2010
Royan International Summer School: Developmental Biology Stem Cells	2011
Congress on Reproductive Biomedicine & Stem Cell Biology & technology	2011
Real Time PCR in the Iranian Biological Center workshop	2011
National Biotechnology Congress of I.R. Iran	2011
Iranian genetics Congress	2012
Flow cytometry and MACS in the Royan Institute workshop	2012
Internal audit of ISO 9001:2008 (GLP) in the Iranian Biological Center workshop	2012
Principles of Good Laboratory Practice (GLP) in the Iranian Biological Center workshop	2012
Photoshop in the Iranian Biological Center workshop	2012
Genetic engineering and gene cloning in the Iranian Biological Center workshop	2012
The principles of clinical cytogenetic in the Iranian Biological Center workshop	2012
SPSS in the Iranian Biological Center workshop	2014
Biostatistics in the Iranian Biological Center workshop	2014
Immunostaining IFC & IHC in the Iranian Biological Center workshop	2015
Tissue Engineering in the Iranian Biological Center workshop	2015
International Congress on Reproduction	2015
SDS Polyacrylamide gel electrophoresis of proteins western blotting & immunodetection	2017

methods in the Iranian Biological Center workshop	
Biosafety in Tehran University of Medical Sciences workshop	2017
Teaching methods in Tehran University of Medical Sciences workshop	2017
Stem Cells and Embryonic Cells culture in the Royan Institute workshop	2018
Primer designing: Principles and softwares in the Iranian Biological Center workshop	2018
National Festival & International Congress on Stem cell & Regenerative Medicine	2018
Microinjection, IVF, Embryo transfer, embryo Hatching, embryo grading	2019
The ideal IVF-lab 2: the equip,ent	2020
The ideal ivf-lab 3: the culture media	2020
The ideal ivf-lab 4: the culture conditions	2020
The ideal ivf-lab 5: infection& hygiene	2020
Strategic management and targeted planning course	2022

Laboratory Techniques:

- ✓ Microinjection, IVF, Embryo transfer, embryo Hatching, embryo grading
- ✓ Tissue culture
- ✓ Human and Animal Cell Culture (Primary cell culture and Cell lines culture)
- ✓ Cell Banking

- ✓ MTT assay
- ✓ Design and Management of Cell Culture Laboratory
- ✓ Detection of mycoplasma contamination in cell culture by DNA Staining and PCR
- ✓ DNA Extraction and RNA Isolation
- ✓ PCR, Real-time PCR
- ✓ Cytogenetic
- ✓ Familiar with principles of GLP,GMP and writing of Lab SOPs

Professional Societies:

Society Name	Iran Association of Veterinary	Genetic Society	Iranian Scientific Association of Embryology and Reproductive Biology
Date(s)	2007- Present	2007- Present	2012- Present