Personal Profile

- **Name:** Maryam Salem
- **Marital Status:** Single
- **Place of Birth:** Ardabil
- **Phone Number:** 09140872894
- **E-Mail Address:** maryamsalem1111@gmail.com

Education

- **PhD in Reproductive Biology, Tehran University of Medical Sciences, 1398-1402**

  Title of Thesis: The investigation of the differentiation of adult human spermatogonial cells in the two-dimensional and the three-dimensional culture systems of platelet rich plasma and the testicular extracellular matrix

- **Master of Science in Animal physiology, University of Mohaghegh Ardabili, 1392-1394**

  Title of Thesis: Evaluation of DNA damage during differentiation of mesenchymal stem cells to germ-like cells based on retinoic acid

- **Bachelor of Science in General Biology, University of Mohaghegh Ardabili, 1388-1392**

Articles

1 Salem M, Feizollahi N, Jabari A, Golmohammadi MG, Shirinsokhan A, Ghanami Gashti N, Bashghareh A, Nikmahzar A, Abbasi Y, Naji M, Abbasi M. Differentiation of human spermatogonial stem cells using a human decellularized testicular scaffold supplemented by platelet-rich plasma. Artificial Organs. 2023 Jan 31.

2 Salem M, Khadivi F, Javanbakht P, Mojaverrostami S, Abbasi M, Feizollahi N, Abbasi Y, Heidarian E, Rezaei Yazdi F. Advances of three-dimensional (3D) culture systems for in vitro spermatogenesis. Stem Cell Research & Therapy. 2023 Sep 21;14(1):262.

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8 Ghanami Gashti N, Sadighi Gilani MA, Kabodmehri R, Nikmahzar A, Salem M, Abbasi M. Evaluation of PGK2 and ACR proteins in seminal plasma: suggestion of potential new biomarkers for prediction of sperm retrieval in non-obstructive azoospermia patients. Human Fertility. 2022 Aug 4:1-7.

9 Salem M, Mirzapour T, Bayrami A, Sagha M. Germ cell differentiation of bone marrow mesenchymal stem cells. Andrologia. 2019 May;51(4): e13229.

10 Salem M, Bayrami A, Mirzapour T, Sagha M. Evaluation of the Effects of Different Concentrations All-trans Retinoic Acid on the Survival of Bone Marrow Mesenchymal Stem Cells. Journal of Arak University of Medical Sciences. 2018;21(1):40-51.

11 Salem M, Mirzapour T, Bayrami A, Sagha M, Asadi A. The effects of sertoli cells condition medium and retinoic acid on the number of colonies of bone marrow mesenchymal stem cells. Ardabil Univ Med Sci. 2017 Apr 10;17(1):7-21.

12 Salem M, Mirzapour T, Bayrami A, Ghaem Maghami R. Comparison of Differentiation and Proliferation Potential of Umbilical Cord and Bone Marrow Mesenchymal Stem Cells for Production of Germ-Like Cells. Pathobiology Research. 2018 Dec 10;22(1):41-50.

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Project collaboration

1 The investigation of the differentiation of adult human spermatogonial cells in the two-dimensional and the three-dimensional culture systems of platelet rich plasma and the testicular extracellular matrix
Project code: 51778

2 Invastigation the differentiation of human spermatogonial stem cells in 3D organoid culture **sys**tem using matrigel and co culture of sertoli cells
Project code: 26134

3 The Study of the in vitro spermatogenesis process in human spermatogenial cells co-cultured with Sertoli cells in the three-dimensional culture system of methylcellulose and testicular extracellular matrix of lamb
Project code: 49482

4 The effect of quercetin on microRNA-27a and microRNA-144 of the Nrf2 pathway, oxidative stress indices and sperm parameters in semen sample of oligoasthenoteratozoospermia patient candidate for ART: RCT(Tripleblind)
Project code: 63199

5 The Study of the in vitro spermatogenesis process in human spermatogenial cells co-cultured with Sertoli cells in the three-dimensional culture system of methylcellulose and testicular extracellular matrix of lamb
Project code: 27638

6 Protective effects of human amniotic membrane derived mesenchymal stem cells (hAMSCs) secreted factors on mouse spermatogenesis and sperm chromatin condensation following unilateral testicular torsion
Project code: 57610