

1) Personal Information:

Name: Zahra Kalhori

Address: Department of Biology, Faculty of Science, Razi University, 6714967346 Kermanshah, Iran

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2) Education:

- BSc. in Biology, Razi University, Kermanshah, Iran (2008).
- MSc. in Developmental Biology, Razi University, Kermanshah, Iran (2011).
- PhD. in Developmental Biology, Department of Biology, Arak University, Iran (2018).

3) Courses Taught:

M.Sc. Courses

- Developmental neurobiology
- Histological Techniques
- Animal cell and tissue culture

B.Sc. Courses

- Developmental Biology
- Animal Cell Differentiation
- Human Embryology
- Animal Embryology
- Animal Histology

4) Work Experience

Laboratory Staff – Andrology Department, Royan Institute (ACECR), (2019 – 2022).

5) Research Interest:

- Infertility and Infertility Treatment
- Assisted Reproductive Techniques (ART)
- Chemotherapy and Its Effects on Fertility

- Stem cells and their applications

6) Postgraduate Students:

Ph.D. Students

- Zeynab Taheri Khas (Razi University, 2020), Advisor; Defended thesis

Master Students

- Avin Golchin, (Razi University, 2024), Supervisor; In progress
- Rasool Razlansari, (Razi University, 2023), Supervisor; In progress
- Zahra Yarmohammadi, (Razi University, 2022), Supervisor; Defended thesis
- Mohammad Faroq Bezdoode, (Razi University, 2022), Supervisor; Defended thesis
- Reihaneh Omrani Dehkahan, (Razi University, 2022), Supervisor; Defended thesis

7) Scientific Publications:

Published Papers

- Zahra Yarmohammadi, Ahmad Gharzi, **Zahra Kalhori***. The Impact of Empagliflozin on in Vitro Maturation of Immature Mouse Oocytes. *Cell Tiss. Biol.* 20, 40–47 (2026). <https://doi.org/10.1134/S1990519X25600668>.
- Nafiseh Asgari, **Zahra Kalhori***. Empagliflozin mitigates doxorubicin-induced hepatotoxicity by reducing inflammation, oxidative stress, and apoptosis in male NMRI mice. *Med Oncol* 42, 542 (2025). <https://doi.org/10.1007/s12032-025-03113-5>.
- Mohammad Faroq Bezdoode, **Zahra Kalhori***, Rasool Razlansari, Azadeh Jamshidi. Empagliflozin Improves Follicular Development by Attenuating Oxidative Stress and Inflammation in a Mouse Model of Polycystic Ovary Syndrome. *Cell Tiss. Biol.* 19, 550–558 (2025). <https://doi.org/10.1134/S1990519X25600619>.
- Zeynab Taheri-Khas, Ahmad Gharzi*, Somaye Vaissi*, Pouria Heshmatzad, **Zahra Kalhori**. Sperm characteristics in the yellow-spotted mountain newt, *Neurergus derjugini* (Salamandridae) through light and electron microscopy. *Amphibia-Reptilia* (2025) 0173-5373(print) 1568-5381 (online) .DOI:10.1163/15685381-bja10229 .
- Zeynab Taheri-Khas, Ahmad Gharzi*, Somaye Vaissi*, Pouria Heshmatzad, **Zahra Kalhori**. Advanced sperm preservation techniques in yellow spotted mountain newts *Neurergus derjugini* enhance genetic management and conservation efforts .*Sci Rep* 15, 9334 (2025). <https://doi.org/10.1038/s41598-025-93284>.

- Ghafarizade, A. A., Shojafar, E., Naderi*, S., Seifi, F., Noshad, A., Lavasani, **Z., Kalhori**, Ghadiri, E. (2024). The Clinical Pregnancy and Live Birth Following Transfer of One Arrested Embryo: A Case Report. *Clinical Journal of Obstetrics and Gynecology*, 7(4), 112–114. <https://doi.org/10.29328/journal.cjog.1001175>.
- Zeynab Taheri-Khas, Ahmad Gharzi, Somaye Vaissi, Pouria Heshmatzad, and **Zahra Kalhori**. "Hormone-Driven Temperature Optimization for Elevated Reproduction in Goldfish (*Carassius auratus*) under Laboratory Conditions" *Animals*. 2024; 14(18):2701. <https://doi.org/10.3390/ani14182701>.
- Geravandi S , Kalehöei E , Karami A , Nowrouzi F , **Kalhori Z** , Zhaleh H , Azadbakht M . Human follicular fluid and mesenchymal stem cell conditioned medium improves in vitro development of vitrified-warmed mouse oocytes. *Cryo Letters*. 2023 Mar-Apr;44(2):80-88.
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakhtmalek, Mohammad Ali Shariatzadeh. L-Carnitine improves endocrine function and folliculogenesis by reducing inflammation, oxidative stress and apoptosis in mice following induction of polycystic ovary syndrome. *Reprod Fertil Dev*. 2019;31(2):282-293. doi: 10.1071/RD18131.
- **Zahra Kalhori**, Mehri Azadbakht*, Malek Soleimani Mehranjani, Mohammad Ali Shariatzadeh. Improvement of the folliculogenesis by transplantation of bone marrow mesenchymal stromal cells in mice with induced polycystic ovary syndrome. *Cytotherapy*. 2018 Dec;20(12):1445-1458.
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. Ovary stereological features and serum biochemical factors following induction of polycystic ovary syndrome with testosterone enanthate in mice: An experimental study. *Int J Reprod Biomed*. 2018 Apr;16(4):267-274.
- Salimi Z, Eskandary A, Headari R, Nejati V, Moradi M, **Kalhori Z**. Antioxidant effect of aqueous extract of sumac (*Rhus coriaria L.*) in the alloxan-induced diabetic rats. *Indian J Physiol Pharmacol*. 2015 Jan-Mar;59(1):87-93.
- **Zahra Kalhori**, Mehri Azadbakht. Hydrostatic Pressure Improves Maturation of Oocyte in Cultures of Follicles Derived from Mouse Polycystic Ovary. *Acta endocrinology*. 2015;11(1):26-31.

- **Zahra Kalhori**, Mehri Azadbakh, Ali Bazdar, Hadis Zeinali. Polycystic Ovary Induction in Mouse by Testosterone Enanthate. Journal of Advanced Biomedical Sciences. 2013, 3(4), 387 – 391.

Abstracts and Presentations

- Zahra Yarmohammadi, Ahmad Gharzi, **Zahra Kalhori**. The effect of Empagliflozin on in Vitro Maturation of Immature Mouse Oocytes, "26th royan international congresson reproductive biomedicine". 2025 (poster)
- Nafiseh Asgari, **Zahra Kalhori**. empagliflozin ameliorate doxorubicin-induced hepatotoxicity by antioxidant and anti-inflammatory effects in male mice, " 2nd national and 1st international conference on cell and developmental biology of Iran". 2025 (poster)
- Nafiseh Asgari, **Zahra Kalhori** . empagliflozin can improve liver enzymes in mice with doxorubicin-induced hepatotoxicity, " 2nd national and 1st international conference on cell and developmental biology of Iran". 2025 (poster)
- Nafiseh Asgari, **Zahra Kalhori** . empagliflozin mitigate doxorubicin-induced hepatotoxicity by reducing apoptosis in male mice, " 2nd national and 1st international conference on cell and developmental biology of Iran". 2025 (poster)
- Zeynab Taheri-Khas, Ahmad Gharzi*, Somaye Vaissi*, Pouria Heshmatzad, **Zahra Kalhori** The effect of increased water temperature on the sperm quality of Marsh frog (*Pelophylax ridibunndus*): the role of global warming in amphibian reproduction, 23th National and 11th International Iranian biology Congress. 2024 (poster)
- Zeynab Taheri-Khas, Ahmad Gharzi*, Somaye Vaissi*, Pouria Heshmatzad, **Zahra Kalhori** Conservation of amphibians using assisted reproductive techniques in captivity: a case study of the Marsh frog (*Pelophylax ridibunndus*) reproduction, 23th National and 11th International Iranian biology Congress. 2024 (poster)
- Zeynab Taheri-Khas, Ahmad Gharzi*, Somaye Vaissi*, Pouria Heshmatzad, **Zahra Kalhori**. The Effect of Extenders on Goldfish (*Carassius auratus*) Sperm Cryopreservation: Ornamental Fishes Reproductive Management, 7th International Congress on Fisheries and Aquatic Research (ICFAR). 2023 (poster)

- Zeynab Taheri-Khas, Ahmad Gharzi*, Somaye Vaissi*, Pouria Heshmatzad, **Zahra Kalhori**. Effects of Injection Site and Water Temperature on Survival of Goldfish (*Carassius auratus*): Hormone Therapy in Ornamental Fishes, 7th International Congress on Fisheries and Aquatic Research (ICFAR). 2023 (poster)
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. Intravenous Injection of Bone Marrow Mesenchymal Stem Cells Improves the Ovary Function through Reduction of Inflammatory Factors in Mice with Induced Polycystic Ovary Syndrome. 18th Royan international congress on reproductive Biomedicine, Tehran, Iran. 2017 (poster)
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. A Stereological Evaluation on the Effect of Bone Marrow-derived Mesenchymal Stem Cells Transplantation on Fullicologenesis in Mice Following Induction of Polycystic Ovary Syndrome. 18th Royan international congress on reproductive Biomedicine, Tehran, Iran. 2017 (poster)
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. Intravenous injection of Bone Marrow Mesenchymal Stem Cells suppresses Oxidative Stress and Apoptosis in Mice with Induced Polycystic Ovary Syndrome. 18th Royan international congress on reproductive Biomedicine, Tehran, Iran. 2017 (poster)
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. The effect of L-carnitin on the Histological changes in Mice Ovary Following Induction of Polycystic Ovary Syndrome: A quantitative study. 3th international congress on reproduction, Tehran, Iran. 2017 (poster)
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. The study of Anti-inflammatory and anti-oxidant effect of l-carnitine in Mice with Induced Polycystic Ovary Syndrome. 3th international congress on reproduction, Tehran, Iran. 2017 (Oral presentation)
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. The effect of L-carnitin on the Histological changes in Mice Ovary Following Induction of Polycystic Ovary Syndrome: A quantitative study. 3th international congress on reproduction, Tehran, Iran. 2017 (poster).
- **Zahra Kalhori**, Malek Soleimani Mehranjani*, Mehri Azadbakht, Mohammad Ali Shariatzadeh. The Effect of L-carnitine on Ovary Function in Mice with Induced

Polycystic Ovary Syndrome. 11th international congress of endocrine disorders.
Shahid Beheshti, Tehran, Iran. 2016 (poster)

- Shirin Geravandi , Mehri Azadbakht, Mitra Bakhtiari, Hossein Zhaleh, **Zahra Kalhori** ,Eshrat Kalehоеi , Azadeh Karami. Comparison of follicular fluid and stem cell conditioned medium as in vitro maturation medium. 2th international congress on reproduction, Tehran, Iran. 2016 (poster)
- **Zahra Kalhori**, Mehri Azadbakht, Hadis Zeinali. The Effect of Hydrostatic Pressure On the in Vitro Maturation of Preantral Follicles Derived from Polycystic Ovaries in Mouse Model. International Journal of Fertility & Sterility. 2011 (poster)
- Hadis Zeinali, Mehri Azadbakht, **Zahra Kalhori**. The Effect of Extracellular Calcium Concentration on the in vitro Maturation of Mouse Oocytes after Mechanical Stimulation by Hydrostatic Pressure. International Journal of Fertility & Sterility. 2011 (poster)