

Curriculum Vitae

Saeed Yakhkeshi, Ph.D

*Assistant Professor at the Agricultural Research,
Education and Extension Organization (AREEO),
Agricultural Biotechnology Research Institute of Iran-
North branch (ABRII), Department of Animal
Biotechnology, Rasht, Iran*

Postal Code: 4188958883

P.O. Box: 41635-4115 Tel: +98 1333661503

E-mail: s.yakhkeshi@abrii.ac.ir; saeedyakhkeshi@gmail.com

<https://scholar.google.com/citations?user=20KJvIkAAAAAJ&hl=fa&scioq=yakhkeshi+saeed>, H-index scholar: 11

Birthday: 21/01/1986 Marital Status: Married, one son



Educational Background

Ph.D: Department of Animal Science, Tarbiat Modares University, Tehran, Iran, 2013-2017.

M.Sc: Department of Animal Science, Tarbiat Modares University, Tehran, Iran, 2009-2012.

B.Sc: Department of Animal Science, Zabol University, Zabol, Iran, 2007-2009.

A.S.: Department of Animal Science, Damghan University, Damghan, Iran, 2005-2007.

Title of the PhD Thesis

In vitro improvement of the quail primordial germ cell culture and implantation for production of a transgenic model

Activity

Research assistant and technician of stem cells lab, 2016-2024 at Royan Institute for Stem Cell Biology and Technology, ACECR. Tehran, Iran.

Honors and Achievements and Visiting

- First-ranked in the Ph.D. exam
- Receiving the grant of the Ministry of Research as the National Foreign Experts Project Foreign Young Talents Program (QN2023041004L), 2024, China.

International research course

Completing an international research course supported by the Ministry of Research including the National Foreign Experts Project Foreign Young Talents Program, in 2024 at School of Biological Science and Engineering, Shaanxi University of Technology, Hanzhong, China.

Research Interests

- 1) Biotechnology (Animal Reproductive Technology, Cloning, Transgenic Technology, CRISPR, Recombinant Protein Production, Egg Bioscience)
- 2) Biology and Development (Cellular and Molecular Science, Cell culture, Embryology, Signaling Pathway and Manipulation)
- 3) Immunology (Monoclonal and Polyclonal Antibody production, Vaccine, IgY Technology, Gut microbiota)

Research Publications

1. **Saeed Yakhkeshi**, Murtala Bindawa Isah, Hamid Sadeghi Abandansari, Xiaoying Zhang. Advances in IgY antibody dosage form design and delivery strategies: Current status and future perspective. *International Journal of Biological Macromolecules*. **2025**, 140291.
2. Yaojun Zhu, **Saeed Yakhkeshi**, Anas Yusuf, Xiaoying Zhang. Frontiers and emerging topics in a century of Silkie chicken research: insights, challenges, and opportunities. *Poultry Science*. March **2025**, 105030.
3. Hedio Poorkazem, Maryam Saber, Azadeh Moradmand, **Saeed Yakhkeshi**, Homeyra Seydi, Ensiyeh Hajizadeh-Saffar, Faezeh Shekari, Seyedeh-Nafiseh Hassani. Comparative effects of various extracellular vesicle subpopulations derived from clonal mesenchymal stromal cells on cultured fibroblasts in wound healing-related process. *The international journal of biochemistry & cell biology*. **2025**. 180, 106737.
4. Mehdi Soleymani-Goloujeh, Mahnaz Babaahmadi, Faezeh Shekari, Mojgan Barati, Nasrin Fallah, Mahmoud Alipour Choshali, Nima Makvnd Gholipour, Maryam Hezavehei, Masoumeh Azimi, **Saeed Yakhkeshi**, Samira Vesali, Saeed Mohammadi, Hossein Baharvand, Seyedeh-Nafiseh Hassani and Ensiyeh Hajizadeh-Saffar. Extracellular vesicles derived from clonal mesenchymal stromal cells preconditioned by indirect hypoxia modulate immune responses in diabetic mice more effectively than directly preconditioned vesicles. *Stem cell research & therapy*, **2025**. 16. 458.
5. Saman Firoozi, Sara Pahlavan, Mohammad-Hossein Ghanian, Shahram Rabbani, Shima Tavakol, Maryam Barekat, **Saeed Yakhkeshi**, Elena Mahmoudi, Mansoureh Soleymani and Hossein Baharvand. A Cell-Free SDKP-Conjugated Self-Assembling Peptide Hydrogel Sufficient for Improvement of Myocardial Infarction. *Biomolecules*. **2024**, 10, 205.
6. Masumeh Zare, Seyed Ziaeddin Mirhoseini, Shahrokh Ghovvati, **Saeed Yakhkeshi**, Mahdi Hesaraki, Mojgan Barati, Forough Azam Sayyapour, Hossein Baharvand, Seyedeh-Nafiseh Hassani. The Constitutively Active pSMAD2/3 Relatively Improves the Proliferation of Chicken Primordial Germ Cells. *Molecular Reproduction and Development*. **2023**. 90 (6) 339-357.
7. Yuzhang Hu, Mei Dang, Murtala Bindawa Isah, **Saeed Yakhkeshi**, Chen Chen, Xiaoying Zhang. Comparative analysis of muscle profiles in silky fowl and white Leghorn Chicken: Insights from multi-omics and experimental approaches. *LWT- Food Science and Technology*. **2023**. 187, 115364.
8. **Saeed Yakhkeshi**, Rao Wu, Brindha Chelliappan and Xiaoying Zhang. Trends in industrialization and commercialization of IgY technology. *Frontiers in Immunology*. **2022**. 13:991931.
9. Rao Wu, **Saeed Yakhkeshi**, Xiaoying Zhang. Scientometric analysis and perspective of IgY technology study. *Poultry Science*. **2022**. 1-14.
10. Azimeh Akhlaghpour, Adeleh Taei, Seyyed Abolghasem Ghadami, Zahra Bahadori, **Saeed Yakhkeshi**, Sepideh Molamohammadi, Tahereh Kiani, Azam Samadian, Zahra Ghezelayagh, Newsha Haghpour, Keynoosh Khalooghi, Thomas Braun, Hossein Baharvand, Seyedeh Nafiseh

-
- Hassani. Chicken Interspecies Chimerism Unveils Human Pluripotency. *Stem cell report*. **2021**. 16. 1-17.
11. Fatemeh Radmanesh, Hamid Sadeghi Abandansari, Mohammad-Hossein Ghanian, Sara Pahlavan, Fahimeh Varzideh, **Saeed Yakhkeshi**, Mehdi Alikhani, Sharif Moradi, Thomas Braun, Hossein Baharvand. Hydrogel-mediated delivery of microRNA-92a inhibitor polyplex nanoparticles induces localized angiogenesis. *Angiogenesis*. **2021**. 24:657–676.
 12. Ensieh Zahmatkesh; Mohammad-Hossein Ghanian; Ibrahim Zarkesh; Zahra Farzaneh; Majid Halvaei; Zahra Heydari; Farideh Moienvaziri; Amna Othman; Marc Ruoss; Abbas Piryaee; Roberto Gramignoli; **Saeed Yakhkeshi**; Andreas Nussler; Mustapha Najimi; Massoud Vosough. Tissue-Specific Microparticles Improve Organoid Microenvironment for Efficient Maturation of Pluripotent Stem Cell-derived Hepatocytes. *Cells*. **2021**, 10, 1274.
 13. Farideh Moeinvaziri, Amir Shojaei, Newsha Haghighparast, **Saeed Yakhkeshi**, Hossein Baharvand. Towards maturation of human otic hair cell-like cells in pluripotent stem cell-derived organoid transplants. *Cell and Tissue Research*. **2021**. 386:321–333.
 14. **Saeed Yakhkeshi**, Shaban Rahimi, Mohsen Sharafi, Seyedeh-Nafise Hassani, Abdolhossein Shahverdi, Hossein Baharvand. Characterization and Migration of Cultured Quail Primordial Germ Cells from Embryonic Blood and Gonad. *Journal of Animal Science*. **2018**. Vol 96.
 15. **Saeed Yakhkeshi**, Shaban Rahimi, Mohsen Sharafi, Seyedeh-Nafise Hassani, Sara Taleahmad, Abdolhossein Shahverdi, Hossein Baharvand. In vitro improvement of quail primordial germ cell expansion through activation of TGF-beta signaling pathway. *Journal of Cellular Biochemistry*. **2018**; 119 (6), 4309-4319.
 16. **S. Yakhkeshi**, S. Shawrang, S. Rahimi. Effect of some acidifiers on gastrointestinal tract characteristics and performance of broiler chicken. *Iranian Journal of Applied Animal Science Acceptance Letter*. **2014**. 4 (1), 143-149.
 17. **S. Yakhkeshi**, S. Rahimi and P. Shawrang. Effects of Electron-Beam Irradiation of the Diet on Microbial Population, Intestinal Morphology, Ileal Digestibility and Performance of Broilers. *Iranian Journal of Applied Animal Science*. **2013**. 3(4), 747-754.
 18. Rahimi, **S., Yakhkeshi**, S., Shawrang, P. Effects of electron beam irradiation and organic acid on production performance and immune responses in broiler chickens. *J. Vet. Res.* **2012**. 67, 3: 223-233.
 19. **S. Yakhkeshi**, S. Rahimi, and H. R. Hemati Matin. Effects of Yarrow (*Achillea millefolium*), Antibiotic and Probiotic on Performance, immune Response, Serum Lipids and Microbial Population of Broilers. *Journal of Agriculture Science Technology*. **2012**. Vol 14:799-810.
 20. **Yakhkeshi S**, Rahimi, Gharib Naseri K. The Effects of Comparison of Herbal Extracts, Antibiotic, Probiotic and Organic Acid on Serum Lipids, immune Response, GIT Microbial Population, Intestinal Morphology and Performance of Broilers. *Journal of Medicinal Plants*. **2011**. Volume 10, No. 37.
-

Published abstracts (International conferences)

1. Effects of Yarrow (*Achillea millefolium*) Levels on Carcass Characteristics, Serum Lipids and Immune Response of Broilers. **S. Yakhkeshi**, S. Rahimi, A. Niknam, H. Hoseinian. XIIIth European poultry conference 2010, Tours France
2. Effect of acidifiers on gastrointestinal tract pH, Microbial Population and broilers performance. **Yakhkeshi S**, Rahimi S, Hamid Hemati Matin, Siavash Askari. 18th European Symposium on Poultry Nutrition, Turkey, November 04, 2011
3. The effects of medicinal plants on carcass characteristics, serum lipids and immune system in broilers. Amir Golpor, Shaban Rahimi, Mahbobe Hatamzade, Salman Mazaheri, Masoomeh Mirzade, Mojgan saeedi, **Saeed Yakhkeshi**, Siavash Askari. 18th European Symposium on Poultry Nutrition, Turkey, November 04, 2011.
4. Effects of Electron-Beam Irradiation on diet characteristics and broilers performance. **Saeed Yakhkeshi**¹, Shaban Rahimi, Parvane Shawrang, Siavash Askari. 18th European Symposium on Poultry Nutrition, Turkey, November 04, 2011
5. Effects of yarrow (*Achillea millefolium*), antibiotic and probiotic on GIT microbial population, immune response, serum lipids and broilers performance. **S. Yakhkeshi**, S. Rahimi, and H. R. Hemati Matin, and A. Rahimi. Poultry science .90(E-Suppl.1). July 16-19, 2011. Missouri America, s Center.
6. Comparison of herbal eExtracts, antibiotic, probiotic and organic Acid on serum lipids, immune Response, GIT microbial Population, Intestinal Morphology and Performance. Rahimi S, **Yakhkeshi S**, GharibNaseri K, and A. Rahimi. Poultry science .90(E-Suppl.1). July 16-19, 2011. St. Louis, Missouri America, s Center.
7. The effect of acidifiers on broilers GIT microbial population, intestinal morphology, ileal digestibility and performance. **Yakhkeshi S**, Rahimi S, Gharib Naseri K. Poultry science .90(E-Suppl.1). July 16-19, 2011. Missouri America, s Center.
8. The effects of medicinal plants on carcass characteristics, serum lipids and immune system in broilers. Golpor, A. Rahimi, S. Hatamzade, M. Mirzade, M. saeedi, **S. Yakhkeshi**, Poultry science .90(E-Suppl.1). July 16-19, 2011. Missouri America, s Center.
9. Effects of Yarrow (*Achillea millefolium*), antibiotic and probiotic on GIT microbial population, immune response, serum lipids and broilers performance. **S. Yakhkeshi**, S. Rahimi, and H. R. Hemati Matin. Poultry science .90(E-Suppl.1). July 16-19, 2011. Missouri America, s Center.
10. Effects of Electron-Beam Irradiation on diet characteristics, intestinal microbial population and morphology, ileal digestibility and performance of broilers. **S. Yakhkeshi**¹, S. Rahimi and P. Shawrang. Poultry science .90(E-Suppl.1). July 16-19, 2011. Missouri America, s Center.

Published abstracts (National conferences)

1. Effects of medicinal plants, antibiotic and probiotic on microbial Population, Intestinal Morphology and Performance of broilers. **Yakhkeshi S**, Rahimi S, GharibNaseri K. 3rd International Veterinary Poultry Congress. February 22-23, 2012-Tehran, Iran. Oral.
2. Effects of different lighting program in presentation of ascites in different strain of broiler chicken. M. Mirzadeh, S. Rahimi, H. Mehrbani, **S. Yakhkeshi**. 3rd International Veterinary Poultry Congress. February 22-23, 2012-Tehran, Iran
3. Comparison of effects of medicinal plants on growth Performance of broiler chickens. M. Mirzadeh, S. Rahimi, H. Saeedi S, Hatamzade M, Golpor A, **S. Yakhkeshi**. 3rd International Veterinary Poultry Congress. February 22-23, 2012-Tehran, Iran.

4. Comparison the effects of medicinal plants on carcass characteristics, serum lipids and immune system in broiler chicks. M. saeedi, Rahimi, S. M. Mirzade, M. Mazaheri, N. Hatamzade, A. Golpor, **S. Yakhkeshi**. 3rd International Veterinary Poultry Congress. February 22-23,2012-Tehran, Iran.
5. Immune modulating effects of garlic, organic selenium and vitamin E in broilers .F.Asadi, S.Rahimi, M. Rahmany, **S.Yakhkeshi**. 2rd International Veterinary Poultry Congress. February 20-21,2010-Tehran, Iran.
6. The effect of garlic herb in comparison with organic selenium and vitamin E on carcass fat and performance of broilers. Hoseynyan Bilandi H, Rahimi S, **Yakhkeshi S**, GharibNaseri K. 3rd International Veterinary Poultry Congress. February 22-23,2012-Tehran, Iran.
7. The effect of antioxidants supplementation in diet on prevention fatty liver syndrome in broilers. H. Hoseynyan, S. Rahimi, **S. Yakhkeshi**, O. Radboy. 2rd International Veterinary Poultry Congress. February 20-21,2010-Tehran, Iran
8. Comparison the effects of medicinal plants on carcass characteristics, serum lipids and immune system in broiler chicks. Golpor, A. Rahimi, S. Hatamzade, M. Mirzade, M.saeedi, **S, Yakhkeshi**. 2th International Congress of Food Hygiene Aprill 30-May 1, 2011 Tehran-Iran.
9. Comparison of levels Yarrow (*Achillea millcfolium*) with antibiotic and probiotic on the performance, blood factors and immune response of Broilers. S. Rahimi, **S. Yakhkeshi***, H. Hoseynian. 2rd International Veterinary Poultry Congress. February 20-21,2010-Tehran, Iran.
10. Improvement of quail primordial germ cell expansion in vitro by activating of TGF- β signaling through a small molecule. **Saeed Yakhkeshi**, Shaban Rahimi, Seyedeh-Nafise Hassani, Mohsen Sharafi, Abdolhossein Shahverdi, Hossein Baharvand.6th International Veterinary Poultry Congress. February 27-March 1, 2018-Tehran, Iran. Oral.
11. Chick Embryo Provides An Applicable System for Evaluating The Chimera-Forming Ability of Human Pluripotent Stem Cells. Azimeh Akhlaghpour, Adeleh Taei, Seyyed Abolghasem Ghadami, Zahra Bahadori, **Saeed Yakhkeshi**, Tahereh Kiani, Azam Samadian, Zahra Ghezelayagh, Newsha Haghparat, Keynoosh Khalooghi, Thomas Braun, Hossein Baharvand1, Seyedeh Nafiseh Hassani. Royan International Twin Congress. 15th Congress on Stem Cell Biology and Technology 28-30 August 2019. Tehran.

Research Projects

- Caspian horse semen cryopreservation
- Caspian horse embryo culture, vitrification and transplantation
- Caspian horse cloning

Teaching Courses

- 2022: Animal Biotechnology, M.Sc. students, University of science & culture. Tehran
- 2016-2018: Animal science (physiology, nutrition and statistics), B.Sc. students, payame noor University, Mazandaran.

Teaching Workshop

- 2021: Chick embryo culture, manipulation and transplantation. Royan institute. Tehran, Iran.
- 2025: International Teaching Workshop for Venezuelan researchers on sheep oocyte retrieval, IVM, IVF, embryo culture and vitrification. ABRII, Karaj, Iran.

Attending Workshop

2017: Animal cells culture. Royan Institute for Stem Cell Biology and Technology, ACECR. Tehran, Iran

2019: Histopathology workshop. Royan Institute for Stem Cell Biology and Technology, ACECR. Tehran, Iran

2017: Introduction in bioinformatics and CRISPR technology. Royan Institute for Stem Cell Biology and Technology, ACECR. Tehran, Iran

2019: Cryobiology and cryopreservation methods. Royan Institute for department of embryology, ACECR. Tehran, Iran.

2017: Introduction in SDS-PAGE and Western blot workshop. Royan Institute for Stem Cell Biology and Technology, ACECR. Tehran, Iran

2019: Flowcytometry applications. Royan Institute for Stem Cell Biology and Technology, ACECR. Tehran, Iran

2018: RT-qPCR Workshop. Royan Institute for Stem Cell Biology and Technology, ACECR. Tehran, Iran

Books

- Book chapter "Transgenic poultry production: new methods and applications"

Reviewer

- Frontiers: comparative immunology
- Scientific Reports
- Veterinary Medicine and Science

Member of Societies

- Society for Poultry Science Association (PSA)
- American Society of Animal Science (ASAS)

Other Skills

- Microsoft Office
- Endnote Reference Manager
- GraphPad Prism

References

- **Prof. Hossein Baharvand**, Professor of Stem Cells and Developmental Biology, Director of Royan Institute for Stem Cell Biology and Technology. Tel: +98 21 22306485. E-mail: h.baharvand@royan-c.ac.ir
- **Prof. Shaban Rahimi**, Professor Department of Poultry Science, Faculty of Agriculture, Tarbiat Modares University. Tehran, Iran. Tel: +98 21 48292358. E-mail: rahimi_s80@yahoo.com
- **Prof. Zhang Xiaoying**, School of Biological Science and Engineering, Shaanxi University of Technology, Hanzhong, China and Department of Biology, Centre of Molecular and Environmental Biology, University of Minho, Braga, Portugal. E-mail: zhang@bio.uminho.pt