

Curriculum Vitae

Name: Shahin Eghbalsaied

Date of birth: 1979/09/22

Place of Birth: Lordegan, Iran



A. Education

Degree	Major	Graduate Institution, State, Country	Thesis Title	Date of Graduation
Ph. D.	Animal Breeding & Genetics	Courses: <ul style="list-style-type: none">Science and Research branch, Islamic Azad University, Tehran, Iran Thesis: <ul style="list-style-type: none">Royan Institute, Isfahan, IranAgReserach, Ruakura Research Centre, Hamilton, New Zealand	Evaluation of Bovine Sperm-mediated Transgenesis using Lipofection and Electroporation Techniques	17 February 2009
M. Sc.	Animal Breeding & Genetics	Paradise of Agriculture and Natural Resources, University of Tehran, Tehran, Iran	Comparison of Internal and External Holstein Bulls for Productive Traits in Different Iranian Climatic Conditions	16 October 2003
B. Sc.	Agriculture, Animal Science	Isfahan University of Technology, Isfahan, Iran	N/A	23 September 2001

B. Research/Employment History

- Instructor in Isfahan (Khorasgan) branch, Azad University from September 2004 to August 2009
- Assistant professor in Isfahan (Khorasgan) branch, Azad University since August 2009
- Research Manager of Faculty of Agriculture, Isfahan (Khorasgan) branch, Azad University since July 2009
- Researcher at AgResearch, Hamilton, New Zealand from May 2008 to October 2008
- Researcher at Royan institute, Isfahan Campus, Iran from April 2005 to February 2009
- Head of Animal Transgenesis Center, Research Institution, Isfahan (Khorasgan) branch, Azad University Since May 2013

C. Fellowships / Awards

- Being qualified for a Post-doctoral Fellowship at AgReserach, Hamilton, New Zealand, 2009, "Epigenetic reprogramming of mammalian embryos"; missed because of being subjected to the military service.
- ISTT-Registration Award, 2014, Transgenic Technologies Meeting, 6-8 October, University of

Edinburgh, Scotland, UK.

- Best Poster Award in '12th Iranian Genetic Congress, 22-24 May 2012, Tehran, Iran' for "Transfer of EGFP transgene into ovine lambs through AI-Laparoscopy".
- Best Speech Award in 'The 6th Conference on New Ideas in Agriculture, 28 February-1 March 2012, Isfahan, Iran' for "A critical note on Sperm-Mediated Gene Transfer theory"
- Selected project (Chicken female-to-male sex reversal) in "the 2st Presidential Festival on Science in Practice, Tehran, Iran. September 2012"
- Selected project (Major SNPs for Iranian Sheep Prolificacy) in "the 1st Presidential Festival on Science in Practice, Tehran, Iran. September 2011"
- Award and Prize for "The best researcher in Isfahan Province during 2011-2013"
- Award and Prize for "The best researcher in Isfahan branch, Islamic Azad University during 2009-2013"

D. Technical Experience

D1. Cell Biology

- Great expertise in cell culture and transfection using lipofection, electroporation, and nucleofection
- Expert in nuclear-cytoplasmic heterokaryon shuttling assays
- Comprehensive experience in microscopy including fluorescence and live cell confocal microscopy

D2. Molecular biology

- Strong experience in molecular biology techniques (PCR, real time PCR, DNA cloning, site-directed mutagenesis, DNA and RNA isolation, RT-PCR)
- Strong background in DNA sequencing methods including Sanger-CE sequencing, pyrosequencing, and Illumina SnipChIP)

D3. Embryo manipulation

- Comprehensive experience in IVM, IVF, Zona-free IVM, Zona-free IVF, ICSI, Microinjection
- Ample experience in Sperm/oocyte/embryo transfection
- Basic knowledge of techniques for cloning animals by somatic nuclear cell transfer and micro injection
- Working experience for the generation of transgenic animals by oocyte microinjection
- Strong experience in chicken embryo injection
- Innovative techniques for making transgenic livestock through Testis-mediated gene transfer (TMGT)
- Innovative methodology to make transgenic chicks applying a virus-free system
- Excellent knowledge of new generation of genome surgery protocols like Zinc-Finger Nucleases, TALENs, CRISPR/Cas9
- Well -trained in making transgenic zebra fish using morpholino and Tol2 transposon systems

D4. Farm Animal Experiences

- Vast of experience and professions in ewe reproduction management
- Expert in chicken surgery for testis mediated gene transfer
- Strong working experience through *in ovo* manipulation technologies

- Strong working experience in sperm collection and artificial insemination of chickens

D5. Biostatistics

- Strong background and comprehensive experience in data analysis using SAS, SPSS, Excell
- Successive years experiences in teaching Advance biostatistics
- Supervision of MSc thesis in experimental design and data analysis

E. Chairman of Conferences

- Chairman of “The 4th Regional Conference on New Ideas in Agriculture”, 2009, Isfahan (Khorasgan) branch, Isfahan, Iran
- Scientific Chairman of “The 5th National Conference on New Ideas in Agriculture”, 2010, Isfahan (Khorasgan) branch, Isfahan, Iran
- Scientific Chairman of “The 6th National Conference on New Ideas in Agriculture”, 2012, Isfahan (Khorasgan) branch, Isfahan, Iran
- Scientific Chairman of “The 1th International Conference on New Ideas in Agriculture”, 2014, Isfahan (Khorasgan) branch, Isfahan, Iran:
http://agriculture.sciencepars.ir/en_iew.aspx?id=1

F. Journal Publication List

F1. Full Papers

F1.1. First/Corresponding Authorship*

1. Mohammadrezaei Mohammad, Majid Toghyani, Abbasali Gheisari, Mehdi Toghyani, Shahin Eghbalsaeid*. Synergistic effect of Fadrozole and insulin-like growth factor-I on female-to-male sex reversal and body weight of broiler chicks. **PLoS ONE**. 9(7): e103570. doi:10.1371/journal.pone.0103570
2. Eghbalsaied Shahin*, Hamidreza Amini, Somayeh Shahmoradi, Majid Farahi. Simultaneous presence of G1 and G4 mutations in growth differentiation factor 9 gene of Iranian sheep. **Iranian Journal of Applied Animal Science**. 2014. In press.
3. Eghbalsaied Shahin, Kamran Ghaedi, Goetz Laible, Mohammad Hossein Nasr-Esfahani and Björn Oback. Exposure to DNA is insufficient for in vitro transgenesis of bovine sperm and embryos. **Reproduction**. 2013. 145 (1), 97-108
4. Eghbalsaied Shahin*, Kamran Ghaedi, Somayeh Shahmoradi, Akbar Pirestani, Hamidreza Saiedi, Linda Nicol, and Alan McNeilly. Screening of GDF9 mRNA in Iranian Af. **International Journal of Fertility and Sterility**. 2012,12(4):
5. Eghbalsaied Shahin*, Majid Toghyani, Kamran Ghaedi and Mohammad Hossein Nasr-Esfahani. A Survey on major genes affective on ovulation rate and prolificacy of sheep. **Genetics in the 3rd Millennium**. 2011;8(4):2169-2189
6. Eghbalsaied Shahin*. Estimation of genetic parameters for 13 female fertility indices in Holstein dairy cows. **Tropical Animal Health and Production**. 2011, 43(4): 811-816
7. Eghbalsaied S.*, M. Moradi- Shahrababak and S.R. Miraie-Ashtiani. Comparison of Progeny's Production Performance from Internal and External Holstein Bulls in Different Climatic Conditions of Iran. **Journal of Research in Agricultural Science**. 2009;5(1)

8. Eghbalsaied Sh., K. Ghaedi, SM. Hosseini, S. Tanhaie, M. Forouzanfar, M. Hajian, NA. Mozafari, MH. Nasr Esfahani. Selection of the Most Appropriate Medium for Assessing Motility and DNA Uptake of Bovine Spermatozoa. **Cell Journal (Yakhteh)**. 2009; 10(4):266-271

F1.2. Collaborative Authorship

1. Manunza, A. Zidi, S. Yeghoyan, V. Balteanu, T.C. Carsai, O. Scherbakov, O. Ramírez, S. Eghbalsaied, A. Castelló, A. Mercadé & M. A high throughput genotyping approach reveals distinctive autosomal genetic signatures for European and Near Eastern wild boar. **PLoS ONE**. 2013. 10.1371/journal.pone.0055891
2. Goli Mohammad, Hamid Ezzatpanah, Mehrdad Ghavami, Mohammad Chamani, Mehdi Majid Toghiani and Shahin Eghbalsaied. The effect of multiplex-PCR-assessed major pathogen subclinical mastitis on somatic cell profiles. **Tropical Animal Health and Production**. (C 2012, DOI: 10.1007/s11250-012-0123-3
3. Mehdi Toghyani, Majid Toghyani, Abbasali Gheisari, Gholamreza Ghalamkari, Shahin Eghbalsaied. Evaluation of cinnamon and garlic as antibiotic growth promoter substitutions on performance, immune responses, serum biochemical and haematological parameters in broiler chicks. **Livestock Science**. 2011, 138:167-173
4. Hosseini S. M., M. Forouzanfar, M. Hajian, V. Asgari, P. Abedi, L. Hosseini, S. Ostadhosseini, F. Moulavi, M. Safahani Langrroodi, H. Sadeghi, H. Bahramian, Sh. Eghbalsaied, Mohammad H. Nasr-Esfahani. Antioxidant supplementation of culture medium during embryo development and/or after vitrification-warming; which is the most important? **Journal of Assisted Reproduction and Genetics**. 2009, 26(6): 355-364
5. Mehrdad Jafarpour, Alireza Jalalizand, Banafsheh Dehdashtizadeh, Shahin Eghbalsaied. Evaluation of some Agricultural Wastes and Food Supplements usage on some Growth Characteristics of *Pleurotus Ostreatus*. **African Journal of Agricultural Research**. 2011; 523: 3291-3296
6. Mehrdad Jafarpour, Alireza Jalalizand, Banafsheh Dehdashtizadeh, Shahin Eghbalsaied. High fiber media as the most efficient substrates for *Pleurotus Florida* culture. **Archives of Biological Science Belgrade**. 2011, 63 (3): 889-895
7. Sajad Fatemi, Mehrdad Jafarpour, Shahin Eghbalsaied, Ahmad Rezapour, Hasan Borji. Effect of essential oils of *Thymus vulgaris* and *Mentha piperita* on the control of green mould and postharvest quality of *Citrus Sinensis* cv. Valencia. **African Journal of Biotechnology**. 10(66): 14932-14936
8. Sajad Fatemi, Mehrdad Jafarpour and Shahin Eghbalsaied. Study of the effect of *Thymus vulgaris* and hot water treatment on storage life of orange (*Citrus sinensis* CV. Valencia). 2012; **Journal of Medicinal Plants Research**, 6(6): 968-971
9. Mehrdad Jafarpour and Shahin Eghbalsaied. High protein complementation with high fiber substrates for oyster mushroom cultures. **African Journal of biotechnology**. 2012; 11 (14): 3284-3289
10. Zeinab Nadimi, Mehrdad Jafarpour, Esmail Mahmoudi, Shahin Eghbalsaied. The Effects of “Thiabendazole, Sodium Bicarbonate, Hot Water Dip, Herbal Plants Extract” Treatments and Fruit Size on Valencia Orange Postharvest Quality and Quantity. **Journal**

of **Academic and Applied Studies**. 2013. 3(6): 8-17

11. Gheisari A.A., P. Ghayor, S. Eghbal-Saeid, M. Toghyani and A.A. Najafi. Effect of Different Dietary Levels of Rapeseed Meal on Reproductive Performance of Iranian Indigenous Breeder Hens. **Asian Journal of Animal and Veterinary Advances**. 2011, 6: 62-70.

F2. Abstracts

1. Eghbalsaied S, Barkhojasteh M, Amini H, Gorjipour A, Salahi M, Abdolhai H. Robust nuclease activities in Salmon trout ooplasm as a main transgenesis hurdle. *Transgenic Research*. 2014. DOI 10.1007/s11248-014-9820-1
2. Eghbalsaied S, Amini H, Abdollahnejad A, Mohammadrezaie M, Pakdel A, Moradi Shar-Babak H, Toghyani M. Bypassing chicken egg albumen nucleases by EDTA and lipoplex could lead to efficient transgenesis. *Transgenic Research*. 2014. DOI 10.1007/s11248-014-9820-1
3. Eghbalsaied S, Laible G, Ghaedi K, Nasr MH, Oback B. Sperm cells are inefficient vectors for bovine in vitro and ovine in vivo transgenesis. **Transgenic Research**. 2013. 22, 225
4. Eghbalsaied S, Nasr-esfahani MH, Ghaedi K , Mozafari NA. Lipofectamine does not enhance bovine sperm transfection efficiency. **Cell Journal** : 2008, 10 (Supplement1)
Eghbalsaied S, B Oback, K Ghaedi, G Laible and M Nasr-Esfahani. Bovine Blastocysts Produced by Sperm-mediated Gene Transfer (SMGT) and IVF
5. **Reproduction in Domestic Animals**. 2009;44(Supplement s1):75
6. Sharafi M, S Eghbalsaied, N Nili and MH Nasr-Esfahani. Ram Semen In vitro Fertility after Cryopreservation using Soybean Lecithin and Egg Yolk Based Extenders. **Reproduction in Domestic Animals**. 2009, 44(Supplement s1):79
7. Eghbalsaied Shahin, Kamran Ghaedi, Mohammad Hossein Nasr Esfahani, Sayed Morteza Hosseini, Somayeh Tanhaiee, Fariba Moulavai,. Noor-Amir Mozaffari, Lipofection of Bovine spermatozoa to carry EGFP transgene into oocytes. **Archives of Iranian Medicine**, 2007. 10 (4) (Supplement 1): 171

F3. Conferences

1. Mohsen Foroughi Abari, Shahin Eghbalsaied*, Stefan Wagner, Kamran Ghaedi, Hamid-Reza Amini. Cloning of Sheep FNDC5 Gene into Non-Viral Vectors. **First International and 13th Iranian Genetics Congress**. 24-26 May 2014, Tehran, Iran.
2. Ehsan Yazdanpanah, Shahin Eghbalsaied, Hossein Sajadi. Fortification with oak fruit flour on texture and sensory properties of bread. **The 1st Conference on New Ideas in Agriculture**, 2014, Isfahan branch, Islamic Azad University, Isfahan, Iran.
3. Shahin Eghbalsaied. Transfer of EGFP transgene into ovine lambs through AI-Laparoscopy. **12th Iranian Genetic Congress**, 22-24 May 2012, Tehran, Iran.
4. Shahin Eghbalsaied and Majid Farahi, Detection of six mutations in GDF9 gene of Iranian Shal and Ghezel breeds. **25th Conference on Genetic Days**. 18-20 September 2012, Wroclaw, Poland.
5. Mohammad Mohammadrezaei, Majid Toghyani, Shahin Eghbalsaied, Abbasali Gheisari, Morteza Esmaeili. Growth and sex differentiation in broiler chickens submitted to in ovo injection of Fadrozole and Insulin-like growth factor-I. **The XXIV World Poultry Science Congress-WPC2012**, 5-9 August 2012, Salvador, Bahia, Brazil.
6. Shahin Eghbalsaied and Akbar Pirestani. A survey on Inbreeding Coefficients of Iranian Holstein

Dairy Cows in Isfahan Province. **International Conference on Life Science and Technology**. 7-9 January 2011, Mumbai, India.

7. Shahin Eghbalsaied, Mehrdad Jafarpour and Fatemeh Bankizadeh. Assessment of fixed models for age at first service and gestation length in Iranian dairy cows. **International Conference on Biotechnology and Environment Management - ICBEM 2011**, Singapore.
8. Shahin Eghbalsaied. A critical note on Sperm-Mediated Gene Transfer theory. **The 6th National Conference on New Ideas in Agriculture**, February 28 to March 1, 2012, Isfahan, Iran.
9. Shahin Eghbalsaied, Kamran Ghaedi and Mohammad Hosein Nasr-Esfahani. Enhance Bovine sperm transfection efficiency using chemical methods. **XX International Congress on Genetics**. 2008, Berlin, Germany.

G. NCBI: GeneBank Records

- [Bos taurus isolate B_F31 AMP-activated protein kinase gamma 1 non-catalytic subunit \(PRKAG1\) gene, partial cds](#)
- [AMP-activated protein kinase gamma 1 non-catalytic subunit, partial \[Bos taurus\]](#)

H. Journal Editor/Reviewer

- Frontiers in Livestock Genetic (Editor)
- Farm Animal Nutrition and Physiology (Editor)
- Archiv Tierzucht (Achieves of Animal Breeding) (Reviewer)
- International Journal of Fertility and Sterility (Reviewer)
- Reproduction in Domestic Animals (Reviewer)
- Journal of Assisted Reproduction and Genetics (Reviewer)
- Veterinary Medicine: Research and Reports (Reviewer)
- Journal of Agricultural Research (Reviewer)

I. National/International Societies Membership

- International Society for Transgenesis Technologies, since 2012
- Eastern Mediterranean Health Genomics and Biotechnology Network (EMGEN), since 2014
- Iranian Genetics Society, The steering committee membership, since 2011
- Iranian Society of Animal Science, since 2003