

Zahra Zandieh

PERSONAL INFORMATION

Date of birth : 08/12/1983

Email address : zandie.dvm@gmail.com
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WORK EXPERIENCE

- 2014 - now Assistant professor of Reproductive Biology in Iran University of medical Sciences, Tehran, Iran
- 2014 - now Clinical embryologist in Akbarabadi hospital IVF centre, Tehran, Iran.
- 2011- now Clinical embryologist in Mehr hospital IVF unite, Tehran, Iran.
- 2010 – 2014 Embryologist in Valiasr IVF centre, Imam Khomeini hospital, Tehran, Iran.

ACADEMIC EDUCATION

- 2001-2008 Doctor of veterinary medicine, Faculty of veterinary, Tehran university – Iran
- 2011-2015 PhD in Reproductive Biology, Iran University of Medical Sciences – Tehran, Iran

TRAINING (relevant to ART)

- Embryology Oocyte identification, Staging, Insemination, Evaluation of embryo quality, Embryo and oocyte freezing and thawing.
- Micromanipulation : ICSI, embryo biopsy (in cleavage and Blastocyst stage)
- Andrology, Semen analysis, sperm preparation and cryopreservation
- Sperm selection method: MACS, Zeta and sperm DFI analysis by SCD and

TUNEL

ADDITIONAL RELEVANT
INFORMATION

Publication :

TLR-1, TLR-2, and TLR-6 MYD88–dependent signaling pathway: a potential factor in the interaction of high-DNA fragmentation human sperm with fallopian tube epithelial cells

Z Zandieh, A Govahi, A Aghamajidi, E Raoufi, F Amjadi, S Aghajanpour, ...
Korean Journal of Fertility and Sterility, 2023

Effects of myo-inositol plus folic acid on ovarian morphology and oocyte quality in PCOS mouse model, M Haghighi, M Mehdizadeh, F Amjadi, **Z Zandieh**, M Najafi, T Artimani, ...
Zygote, 2023, 1-12

miRNAs secreted by human blastocysts could be potential gene expression regulators during implantation, S Eivazi, F Tanhaye Kalate Sabz, S Amiri, **Z Zandieh**, M Bakhtiyari, ...
Molecular Biology Reports, 2022, 1-9

The role of myo-inositol supplement in assisted reproductive techniques
Z Bashiri, N Sheibak, F Amjadi, **Z Zandieh**
Human Fertility, 1-17, 2022

Microfluidic chips as a method for sperm selection improve fertilization rate in couples with fertilization failure
JS Mirsanei, N Sheibak, **Z Zandieh**, M Mehdizadeh, R Aflatoonian, ...
Archives of Gynecology and Obstetrics, 1-10, 2022

Sperm–oviduct interaction: Differential gene expression of growth factors induced by sperm DNA fragmentation
R Mohammadi, SO Mousavi, N Sheibak, F Amjadi, **Z Zandieh**, ...
Andrologia 54 (5), e14378, 2022

GM - CSF (granulocyte - macrophage colony - stimulating factor) treatment improves sperm parameters in men with oligoasthenoteratospermia via PI3K/AKT pathway
F Tanhaye Kalate Sabz, FS Amjadi, **Z Zandieh**, E Hosseini, R Aflatoonian, ...
Andrologia, e1442, 2022

The effect of Myo-Inositol supplement on molecular regulation of folliculogenesis, steroidogenesis, and assisted reproductive technique outcomes in patients with polycystic ...
M Tabatabaie, S Amiri, M Golestan Jahromi, AA Sene, **Z Zandieh**, ...
Molecular Biology Reports 49 (2), 875-884, 2022

Molecular signature of immunological mechanism behind impaired endometrial receptivity in polycystic ovarian syndrome
F Amjadi, **Z Zandieh**, M Mehdizadeh, M Ajdary, A Aghamajidi, E Raoufi, ...

Archives of Endocrinology and Metabolism, 2022

Using artificial intelligence to predict the intrauterine insemination success rate among infertile couples

AA Sene, **Z Zandieh**, M Soflaei, HM Torshizi, K Sheibani
Middle East Fertility Society Journal 26 (1), 1-7, 2021

Comparing various protocols of human and bovine ovarian tissue decellularization to prepare extracellular matrix-alginate scaffold for better follicle development in vitro

H Nikniaz, **Z Zandieh**, M Nouri, N Daei-Farshbaf, R Aflatoonian.
2021, BMC biotechnology 21 (1), 1-8

Male factors: the role of sperm in preimplantation embryo quality

Z Bashiri, F Amidi, I Amiri, **Z Zandieh**, CB Maki, F Mohammadi, S Amiri, ...
2021, Reproductive Sciences 28 (7), 1788-1811

Association of leptin G2548A and leptin receptor Q223R polymorphisms and their serum levels with infertility and recurrent pregnancy loss in Iranian women with polycystic ovary ...

FB Kargasheh, S Ansari-pour, N Borumandnia, N Moradi, **Z Zandieh**, ...
2021, Plos one 16 (8), e0255920

Immunological response of fallopian tube epithelial cells to spermatozoa through modulating cytokines and chemokines

SO Mousavi, R Mohammadi, F Amjadi, Z Zandieh, S Aghajanpour, ...
2021, Journal of Reproductive Immunology 146, 103327

Risk of embryo aneuploidy is affected by the increase in sperm DNA damage in recurrent implantation failure patients under ICSI-CGH array cycles

F Asgari, A Gavahi, M Karimi, A Vatannejad, F Amjadi, R Aflatoonian, **Z Zandieh**.
2021, Human Fertility, 1-9

Relationship between sperm parameters and clinical outcomes of Intra Uterine Insemination (IUI)

F Mohammadi, Z Mehdinia, S Ghasemi, Z Zolfaghari, FS Amjadi, **Z Zandieh**.
2021, Caspian Journal of Internal Medicine 12 (1), 70

The effect of preincubation time and myo-inositol supplementation on the quality of mouse mii oocytes

F Mohammadi, M Ashrafi, **Z Zandieh**, M Najafi, B Niknafs, FS Amjadi, ...
2020, Journal of Reproduction & Infertility 21 (4), 259

Interaction of sperm with endometrium can regulate genes involved in endometrial receptivity pathway in mice: An experimental study

M Ajdary, **Z Zandieh**, FS Amjadi, F Keyhanfar, M Mehdizadeh, ...
2020, International Journal of Reproductive BioMedicine 18 (10), 815

The uterine immunological changes may be responsible for repeated implantation failure

F Amjadi, **Z Zandieh**, M Mehdizadeh, S Aghajanpour, E Raoufi, ...
2020, Journal of reproductive immunology 138, 103080

Does myoinositol supplement improve sperm parameters and DNA integrity in patients with oligoasthenoteratozoospermia after the freezing–thawing process?

M Abdolsamadi, F Mohammadi, MS Nashtaei, M Teimouri, R Sardar, **Z Zandieh**.
2020, Cell and tissue banking 21 (1), 99-106

Evaluation of enkephalin-degrading enzymes in sperm from heroin-addicted men

S Rezaei-Mojaz, Z Nazmara, M Najafi, M Movahedin, **Z Zandieh**, ...

2020, International journal of fertility & sterility 13 (4), 301

Design and evaluation of a novel nanodrug delivery system for reducing the side effects of clomiphene citrate on endometrium

M Ajdari, F Keyhanfar, R Aflatoonian, A Amani, FS Amjadi, **Z Zandieh**, ...
2020, DARU Journal of Pharmaceutical Sciences 28, 423-432

Evaluation of angiopoietin-like protein 3 (ANGPTL3) levels in polycystic ovary syndrome

A Vatannejad, F Salimi, N Moradi, FZ Fouani, **Z Zandieh**, S Ansari pour, ...
2020, Life Sciences 263, 118595

The Effect of Heroin Addiction on Human Sperm Parameters, Histone-to-Protamine Transition, and Serum Sexual Hormones Levels.

Z Nazmara, M Najafi, S Rezaei-Mojaz, M Movahedin, **Z Zandieh**, ...2019. SBMUJournal

Z Zandieh, M Ashrafi, K Aflatoonian, R Aflatoonian. Human sperm DNA damage has an effect on immunological interaction between spermatozoa and fallopian tube. *Andrology*, 2019. doi: 10.1111/andr.12574

Z Zandieh, F. Mohammadi . N. Varanloo . M. Heydari Nasrabadi . A. Vatannejad . F. S. Amjadi . M. Javedani Masroor . L. Bajelan . M. Mehdizadeh . R. Aflatoonian . Supplementation of sperm freezing medium with myoinositol improve human sperm parameters and protects it against DNA fragmentation and apoptosis. *Cell and Tissue Banking*, 2019. Doi : 10.1007/s10561-018-9731-0.

Amjadi F, E Salehi, **Z Zandieh**, M Rashidi, S Taleahmad... Comparative evaluation of NOTCH signaling molecules in the endometrium of women with various gynecological diseases during the window of implantation- *Iranian Journal of Basic Medical Sciences*, 2019;22:1-6.

M Shanaki, N Moradi, R Fadaei, **Z Zandieh**, P Shabani. Lower circulating levels of CTRP12 and CTRP13 in polycystic ovarian syndrome: Irrespective of obesity. 2018. *PloS one* 13(12): e0208059.

Z Zandieh, F Amjadi, H Vakilian, K Aflatoonian Sex hormones alter the response of Toll-like receptor 3 to its specific ligand in fallopian tube epithelial cells. *Clinical and experimental reproductive medicine*, 2018.45(4):154-162.

Zhaecentan S, Amjadi FS, **Zandieh Z**, Joghataei M, Bakhtiyari M, Aflatoonian R. The effect of hydrocortisone on tight junction genes in an in vitro model of human fallopian epithelial cells. *European journal of obstetrics and Gynecology*, 23-5-2018. DOI: <https://doi.org/10.1016/j.ejogrb.2018.05.034>

Fatemehsadat Amjadi, Zahra Zandieh, Ensieh Salehi, Reza Jafari, Nasrin Ghasemi, Abbas Aflatoonian, Alireza Fazeli, Reza Aflatoonian. Variable localization of Toll-like receptors in human fallopian tube epithelial cells. Clin Exp Reprod Med 2018;45(1):1-9

M Jafarabadi, A Sasani, F Ramezanzadeh, Z Zandieh, M Shariat, F Haghollahi. Intracervical application of seminal plasma at the time of oocyte pickup during in vitro fertilization. Acta medica mediterranea, 2016.

Sex hormones alter Toll-Like Receptor expression in human fallopian tube epithelial cells in Vitro. Zahra Zandieh¹(DVM, PhD student), Fatemehsadat Amjadi¹(PhD student), Mahnaz Ashrafi²(MD), Abbas Aflatoonian³(MD), Alireza Fazeli⁴(PhD) and Reza Aflatoonian^{5}(MD, PhD). Cell journal.2016, Vol 17, No 4.*

Evaluation of immunological interaction between sperm and Fallopian tube epithelial cells.
Zahra Zandieh, Mahnaz Ashrafi, Behnam Jameie, Saeid Amanpour, Nariman Mosaffa, Reza Salman Yazdi, Allan Pacey, and Reza Aflatoonian. *Andrologia*. 2015 Dec; 47(10):1120-30. doi: 10.1111/and.12391. Epub 2015 Jan 7.

Pregnancy outcome after blastocyst stage transfer comparing to early cleavage stage embryo transfer. Azimikhoo E, Mohseni Salehi MS, Kalantari V, Shahrokh Tehraninejad E, Haghollahi F, Hossein Rashidi B, **Zandieh Z**. *Gynecol Endocrinol*. 2015 Nov; 31(11):880-4. doi: 10.3109/09513590.1056141. Epub 2015 Oct 6.

Stimulation of the endometrium with high-grade blastocyst culture supernatant (SEHB) can improve pregnancy outcome for couples undergoing intracytoplasmic sperm injection (ICSI): a randomized clinical trial. Ensieh Shahrokhe Tehraninejad • Fateme Davari Tanha • Mahsa Ghajarzadeh • **Zahra Zandieh** • Elham Azimineko • Haleh Rahmanpour Zanjani. *Arch Gynecol Obstet*, DOI 10.1007/s00404-011-2143-z, 2011

Presentation :

O-137 Evaluation of the effect of seminal plasma exosomes from unexplained infertile men on the expression of implantation-related genes – oral presentation
H Gholipour, M Bakhtiyari, FS Amjadi, M Mehdizadeh, R Aflatoonian, **Z Zandieh**.
Human Reproduction 37 (Supplement_1), deac105. 037- ESHRE 2022

P-103 Novel sperm preparation techniques compared with conventional preparation method
N Vahidi, FS Amjadi, F Kalat. sabz, Z Zandieh, N Narimani
Human Reproduction 36 (Supplement_1), deab130. 102 - ESHRE 2021

P-102 GM-CSF (granulocyte-macrophage colony-stimulating factor) as a sperm medium supplement improves sperm quality in Oligoasthenoteratospermia (OAT) men by activating the PI3K ...
F Tanhay. Kalat. Sabz, M Ashrafi, F Amjadi, Z Zandieh, E Hosseini, ...
Human Reproduction 36 (Supplement_1), deab130. 101 – ESHRE 2021

P-369 Three-dimensional co-culture of human endometrial cells with aneuploid and euploid embryos
S Amiri, F Amjadi, M Ashrafi, R Aflatoonian, A Akbar. Sene, Z Zandieh.
Human Reproduction 36 (Supplement_1), deab130. 368 – ESHRE 2021

P-062 Annexin-V MACS method could be a good choice for sperm selection with high PLCZ1 expression and high blastocyst rate in high DFI male factor
M Saleh. Novin, Z Zandieh, M Bakhtiyari, R Aflatoonian
Human Reproduction 36 (Supplement_1), deab130. 061 – ESHRE 2021

Sperm DFI changes cytokines influences in fallopian tube using PCR array
R Mohammadi, SO Mousavi, M Sabbaghian, S Aghajanzpour, Z Zandieh, ...
HUMAN REPRODUCTION 34, 168-168 – ESHRE 2019

Sperm DNA Damage have an Effect on aneuploidy-euploidy of Embryos in ICSI-CGH Array Cycles
Z Zandieh, A Gavahi, F Asgari, F Amjadi, V Akram, L Bajelan, ...
HUMAN REPRODUCTION 34, 193-193 – ESHRE 2019

Primordial Follicle Viability Following Culture in to the Decellularized Ovarian Scaffold in vitro
H Nikniaz, B Jameie, Z Zandieh, M Nouri, R Aflatoonian
HUMAN REPRODUCTION 34, 357-357 – ESHRE 2019

Preincubation time can be effective on the quality and fertilization potential of mouse MII oocytes
F Mohammadi, Z Zandieh
Fertility and Sterility 112 (3), e252 – ASRM 2019

Mohamadi, Varanlou, N; vatannejad A., Haghighi; Amjadi, Aflatoonian, **Zandieh, Z.** Myoinositol is a good freezing supplement to improve human semen parameters and DNA fragmentation. Poster presentation, ESHRE 2018, Spain.

Amjadi, F.; **Zandieh, Z.**; Mehdizadeh, M.I.; Aghajanzpour, S.; Aflatoonian, R. Which one is more effective on Recurrent Implantation Failure, innate or adaptive immunity?. Poster presentation, ESHRE 2018, Spain.

Zahra Zandieh. Gamete handling in patients with infectious disease. Oral presentation, ISERB 2018. Tehran, Iran.

Zahra Zandieh, Fertility preservation in cancer patients, update in Laboratory. Oral presentation. Fertility preservation in cancer patient symposium, Akbar abadi Hospital, 2018. Tehran, Iran.

E. Salehi I, F. Amjadi, **Z. Zandieh**, M. Rashidi, R. Aflatoonian, M. Mehdizadeh. Comparative evaluation of Notch signaling pathway in the endometrium of women with PCOS, endometriosis, RIF and healthy fertile controls during luteal phase. Poster presentation, ESHRE 2017.

Zandieh Z, Golestan, M, Aghajanzpour, S, Ashrafi, M, Aflatoonian, R. Toll Like Receptors signaling pathway PCR array in Recurrent Implantation Failure patient with high and low Sperm DNA damage. ESHRE, Finland, Helsinki 2016.

Zandieh Z, Vatannejad A., Zabihzadeh S., Haddadi M., Bajelan L., Aboutorabi E., Amanpour S. Comparing Reactive oxygen species and DNA fragmentation in semen samples of healthy and unexplained infertile men. ISERB congress, Iran 2016.

Zandieh Z, Correlation between expression of neutral endopeptidase (Nep/CD10) and aminopeptidase N (APN/CD13) in normal human sperm cells with body mass index. Royan International congress 2016.

Zandieh Z, Semen Parameters and Sexual Hormones in the addicted men following Heroin abuse. Royan International congress 2016.

Zandieh Z, Ashrafi M, Mosaffa N, Sabbaghian M, Sadighi Gilani, Pacey A, Aflatoonian R. Toll Like Receptors signaling pathway PCR array in Recurrent Implantation Failure patient with high and low Sperm DNA damage. poster presentation in ESHRE 2015, selected for poster award.

Zandieh Z, Ashrafi M, Amanpour S, Aflatoonian R. TLRs are a new insight in physiology of maternal interaction with sperm. Oral presentation in 20th National Congress on Infertility and Reproduction. June 2014.

Zandieh Z, Amjadi F, Aflatoonian A, Fazeli A, Aflatoonian R. Hormonal regulation of TLRs in human fallopian tube cells. Oral presentation and award winner in 5th Yazd international congress and student award in reproductive medicine. 2013

Zandieh. Z, Amjadi. F, Ashrafi. M, Aflatoonian. R., Evaluation of Toll Like Receptors (TLRs) expression in human fallopian tube. Poster presentation in Middle East Fertility Society (MEFS), September 2012.

Zandieh, Z.; Amjadi, F.; Ashrafi, M.; Amanpour S.; Aflatoonian, R. Evaluation of Toll Like Receptors (TLRs) expression in human fallopian tube cell line. Oral presentation in Reproductive Biology symposium. Yazd 2012.

S. H. Emami-Razavi, N. Esmaeili, S. K. Forouzannia, S. Amanpour, S. Rabbani, A. M. Alizadeh, **Z. Zandieh**, N. Nafarie. Effect of bentonite on skin wound healing :Experimental study in the rat model. Poster presentation in International cancer congress of Asia Pacific. 2006.

Amjadi F, **Zandieh Z**, Salehi E, Aflatoonian A, Fazeli A, Aflatoonian R. Variable localization of TLRs in human fallopian tube epithelial cells. Poster presentation in 20th National Congress on Infertility and Reproduction. June 2014

Professional bodies and membership:

- Member of European Society of Human Reproduction and Embryology (ESHRE)
- Member of Iranian Society of Embryology & Reproductive Biology (ISERB)
- Member of reproductive biology core of Cellular and Molecular Research Centre
- Member of Iranian Society for Reproductive Medicine (ISRM)
- Organizing workshop on “sperm DNA fragmentation tests” in reproductive biology department of Iran University of Medical Sciences (2018 & 2019)
- Member of scientific committee of 13th National congress of Anatomical Sciences. 2018
- Member of scientific committee of International congress of Reproductive biology (ISERB 2016, 2018)
- Member of scientific committee of 21th and 22th International congress of Reproductive Medicine (Royan Virtual Congress 2020, 2021)
- Review papers for Journal of Reproduction and infertility (Manuscript ID: JRI-2202-2165,)
- Review papers for Canadian Journal of Physiology and Pharmacology
- Working as an active researcher in Global Andrology Forum (GAF) project with Professor Ashok Agarwal (Director of Research, Global Andrology Forum and professor of surgery (Urology) , Cleveland, Ohio, USA).

Prizes/Awards:

- Preselected for Basic Science award for poster presentation in ESHRE, Lisbon, 2015.
- The Best Basic Science Researcher award in PhD student of Department of Anatomy at Iran University of medical Sciences(2015)
- 5th Yazd international congress and student award in reproductive medicine. 2013.

Link of Citation:

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