Curriculum Vitae



Personal details:

First Name: Mitra

Last Name: Arianmanesh Place of Birth: Tehran, IRAN Marital Status: Married, one child

Profession: 1. Assistant Professor, Faculty of Medicine

Dept. of Anatomical Sciences

Zanjan University of Medical Sciences (ZUMS)

2. Clinical Embryologist at IVF clinic in Mousavi Hospital

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• Academic Qualifications:

• **2007-2011** Ph.D in Reproductive and Developmental Biology, Institute of Medical Sciences (IMS), University of Aberdeen, Aberdeen, Scotland, UK *Ph.D Thesis*: Identification of embryo implantation-related proteins.

• 1999-2002 M.Sc in Anatomical Sciences, Tarbiat Modarres University (TMU), Tehran, Iran

M.Sc Thesis: The effect of progesterone on the ultrastructure of mouse endometrium during pre-implantation and implantation after hyperstimulation.

• 1994-1998 B.Sc in Occupational Therapy, University of Welfare and Rehabilitation Science, Tehran, Iran

• Teaching/Work Experiences:

- Faculty member of Zanjan University of Medical Sciences from 2011 to present. Courses Taught:
 - Embryology (1) and Embryology (2) (Anatomical Sciences students, MSc)
 - Embryology (Dentistry and Midwifery students)
 - General Histology (Anatomical Sciences students, MSc)
 - General Anatomy (Midwifery, Operating room technicians and Anesthesia technicians)
 - Histology (Pharmacy and Lab Sciences students)
 - Anatomical Sciences 1 and 2 (Dentistry students)
 - Oral Histology & Embryology (Dentistry students)
- Instructor at Azad University of Damghan from February 2004 to July 2004. Course Taught: Histology (Biology students)

• Workshops Attended:

- Ethics and laws in infertility treatments, Royan Institute, 2013, Tehran, IRAN
- Evaluation of students and planning for questions, Zanjan university of medical sciences,
 2013, Zanjan, IRAN
- Isolation, culture and differentiation of mesenchymal stem cell, SABZ Biomedical Science, 2011, Tehran, IRAN
- Production and culture of embryonic stem cell, SABZ Biomedical Science, 2011, Tehran, IRAN
- Sperm Preparation in ART, Vali-E-Asr Reproductive Health Research Center, 2009, Tehran, IRAN
- Getting Published, University of Aberdeen, 2008, Aberdeen, UK
- Proteome Workshop, University of Aberdeen, 2007, Aberdeen, UK
- Protein Workshop, University of Aberdeen, 2007, Aberdeen, UK
- Protein Separation and Detection Workshop, University of Aberdeen, 2007, Aberdeen,
 UK

- Microscopy Workshop, University of Aberdeen, 2007, Aberdeen, UK
- Basic Statistics, University of Aberdeen, 2007, Aberdeen, UK
- Presentation Skills, University of Aberdeen, 2007, Aberdeen, UK
- Strategies for Academic Research, University of Aberdeen, 2007, Aberdeen, UK
- Scientific Writing, University of Aberdeen, 2006, Aberdeen, UK

• Research Publications:

- Al-Gubory KH, <u>Arianmanesh M</u>, Garrel C, Bhattacharya S, Cash P, Fowler PA, Proteomic analysis of the sheep caruncular and intercaruncular endometrium reveals changes in functional proteins crucial for the establishment of pregnancy (English). Reproduction, vol, 147, no. 5, 2014, 599-614.
- Mitra Arianmanesh, Rebecca H McIntosh, Richard G Lea, Paul A Fowler, Kaïs H Al-Gubory, Ovine corpus luteum proteins, with functions including oxidative stress and lipid metabolism, show complex alterations during implantation (English). Journal of Endocrinology, vol. 210, no. 1, 2011, 47-58.
- Salehnia M., <u>Arianmanesh M.</u>, Beigy M., The impact of ovarian stimulation on mouse endometrium: a morphometrical study (English). Iranian Journal of Reproductive Medicine, vol. 4, no. 1, 2006, 7-11.
- Salehnia M., <u>Arianmanesh M.</u>, Beigy M., Mouse endometrial glycocalyx alteration after ovarian hyperstimulation and progesterone injection (English), The Quartery Journal of Yakhteh, vol.4, no.16, winter 2003, 213-218.
- <u>Arianmanesh M.</u>, Salehnia M., Niknafs B.,The effect of progesterone on the ultra structure of mouse endometrium during preimplantation after hyperstimulation (Farsi), The Quartery Journal of Yakhteh, no.14, summer 2002, 61-65.

• Posters/Presentations in Congresses & Conferences:

• Quantitative proteomic analysis of inter-caruncle sheep endometrium during periimplantation period. SRF Annual Conference, Oxford, UK, July 12-14, 2009.

- Proteomic profiling of the endometrium during implantation. SGI Annual Scientific Meeting, Glasgow, UK, March 18-21, 2009.
- Peri-implantation alterations in the corpus luteum proteome. SRF Annual Conference,
 Edinburgh, UK, 29 June to 1 July, 2008. 3
- Morphological Studies of Stimulated Endometrium. The MEFS (The Middle East Fertility Society) Congress, Jordan, December 1-3, 2004.
- Biological Effects of Ionizing Radiation on Human. The 3rd International WONUC Conference on the effects of low and very low ionizing radiation on human health, Tehran, Iran, October 21-24, 2003.
- Glycocalyx Alteration of Mouse Endometrium after Ovarian Hyperstimulation and Progesterone Injection, The MEFS (The Middle East Fertility Society) Congress, Cairo, Egypt, 2002.
- The Effect of Progesterone on the Ultrastructure of Mouse Endometrium During Preimplantation After Hyperstimulation, 10th World Congress On The Menopause, Berlin, Germany, June 10-14, 2002.

• Research grants:

• 2014 A joint research grant in collaboration with Royan Institute:

The title of research grant: Comparison of APOA1 secretion level in the secretome of euploid embryos with aneuploid embryos

• Thesis Supervision:

• **2014** The effect of Heat Shock Protein 60 (HSP60) on rates of fertilization and embryo cleavage

• Thesis co-supervision:

• **2014** Proteomic comparison of cancerous tissue of women breast with healthy tissue surrounding the cancerous tissue

• Thesis Advisory:

- 2014 The effect of Human Chorionic Gonadotropin (HCG) on sperm motility and fertility
- 2013 The effect of Insulin and natural honey on gene expression of Bcl-2 and the level of SOD activity in hippocampus of diabetic rats

Awards:

• First grade among M.Sc students in Anatomical Sciences in Tarbiat Modarres University (TMU), 2002

Scientific technical skills:

• Clinical:

- Sperm preparation for IUI, IVF and ICSI
- Sperm function tests
- Sperm chromatin integrity assays
- Oocyte and embryo manipulation
- In Vitro Maturation (IVM)
- Oocyte denudation
- Sperm freezing
- Oocyte and embryo freezing
- Microinjection (ICSI)
- Embryo transfer (ET)

• Experimental:

- Experimental IVF
- Protein, RNA and DNA extraction
- One dimensional gel electrophoresis (1DE)
- Two dimensional gel electrophoresis (2DE) (Proteomics technology)
- Spot analysis of 2DE gel
- Western blot
- Immunohistochemistry
- Enzyme-Linked Immunosorbent Assay (ELISA)
- Primer Design
- Real Time PCR
- Light Microscopic study
- Transmission Electron Microscopy

Software analysis:

- SPSS statistics package
- Image analysis for Western blot
- Image analysis for 2DE gel

• Lines of Research Interest:

- Assisted Reproductive Technology
- Male and female Infertility
- Reproductive Biology
- Protein study

• References:

Paul A Fowler, B.Sc, Ph.D

Full professor at the Institute of Medical Sciences, Division of Applied Medicine, University of Aberdeen, Foresterhill, Aberdeen, AB25 2ZD, Scotland, UK

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July 2014