

# Curriculum Vitae

## Behrouz Aflatoonian Ph.D.

### CURRENT POSITION

**Co- Director**  
**Centre for Stem Cell Biology Research (CSCBR)**  
**Yazd Reproductive Sciences Institute**  
Yazd Shahid Sadooghi University for Medical Sciences  
Yazd, Iran  
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### PRESVIOUS POSITIONS

**2011-2014: Lab Director**  
**Assistant Conception Unit**  
Madar Hospital, Yazd, Iran.  
**Lab Director**  
**Assistant Conception Unit**  
Laleh Hospital, Tehran, Iran.

**2009-2011: Clinical Embryologist**  
**Assistant Conception Unit**  
Madar Hospital, Yazd, Iran.  
**Clinical Embryologist**  
**Assistant Conception Unit**  
Laleh Hospital, Tehran, Iran.

**2009: Production Manager**  
**Stem Cell Derivation Facility (GMP)**  
**Centre for Stem Cell Biology**  
University of Sheffield  
Jessop Wing, Tree Root Walk  
Sheffield, S10 2SF, UK

**2008: Post-Doctoral Research Assistant**  
**Centre for Stem Cell Biology**  
University of Sheffield  
Jessop Wing, Tree Root Walk  
Sheffield, S10 2SF, UK

**2003- 2008 MPhil, PhD****Centre for Stem Cell Biology,**

University of Sheffield

Jessop Wing, Tree Root Walk

Sheffield, S10 2SF, UK

Title of Thesis: AN INVESTIGATION OF HUMAN EMBRYONIC STEM AND GERM CELL DERIVATION *IN VITRO*. **Supervisor: Professor Harry D Moore.**

**1999-2003 Trainee Embryologist****Assistant Conception Unit**

Madar Hospital, Yazd, Iran

**PUBLICATIONS**

- 2014:** Raina T., Iqbal J, Arnold N., Moore H., Aflatoonian B., Walsh J., Whitehouse S, Al-Lamee K, Francis S, Gunn J. Coronary stents seeded with human trophoblastic endovascular progenitor cells show accelerated strut coverage without excessive neointimal proliferation in a porcine model. *EuroIntervention*. 2014;10:709-716.
- 2014:** Hoseini F., Noori Mugahi S., Akbari-Asbagh F., Eftekhari-Yazdi P., Aflatoonian B., Aghaee-Bakhtiari S., Aflatoonian R., Salsabili N. A randomized controlled trial of gonadotropin-releasing hormone agonist versus gonadotropin-releasing hormone antagonist in Iranian infertile couples: oocyte gene expression. *Daru*. 2014;7:22(1):67.
- 2014:** Raina T., Arnold N., Moore H., Aflatoonian B., Walsh J., Whitehouse S., Al-Lamee K., Francis S., Gunn J., Iqbal J. Stem Cell Coated Metallic Coronary Stents Show Accelerated Strut Coverage without Excessive Neointimal Proliferation in a Porcine Model. *Heart*. 2014;100:A88-A89, Issue Suppl 3, Abstract 152.
- 2013:** Aflatoonian N., Eftekhari M., Aflatoonian B., Rahmani E., Aflatoonian A. Surrogacy as a good option for treatment of repeated implantation failure: a case series. *Iran J Reprod Med*. 2013;11:77-80.
- 2010:** Aflatoonian B., Ruban I., Shamsuddin S., Baker D., Andrews P., Moore H. Generation of Sheffield (Shef) human embryonic stem Cell lines using a microdrop culture system. *In Vitro Cell*.

- Del.Biol.-Animal.* 2010; 46: 236- 241.
- 2009:** Aflatoonian B., Ruban L., Jones M., Aflatoonian R., Fazeli A. and Moore HD. *In vitro* post-meiotic germ cell development from human embryonic stem cells. *Hum Reprod.* 2009; 24:3150- 3159.
- 2009:** Aflatoonian B., Aflatoonian R., Ruban L., Fazeli A. and Moore HD. Embryoid bodies from human embryonic stem cells for niche for male germ cell development *in vitro*. In: J.L. Balleca Lagarda R. Olivia (eds). 9<sup>th</sup> International Congress of ANDROLOGY. Barcelona, Spain. March 10<sup>th</sup>- 11<sup>th</sup> 2009: Medimond, 169- 175.
- 2008:** Moore H., Udayshankar R., Aflatoonian B. Stem cells for reproductive medicine. *Mol Cell Endocrinol.* 2008 Mar 4.
- 2007:** Moore H. and Aflatoonian B. From stem cells to spermatozoa and back. *Soc Reprod Fertil Suppl.* 2007; 65: 19-32.
- 2007:** The International Stem Cell Initiative, Adewumi O, Aflatoonian B. *et al.*, Characterization of human embryonic stem cell lines by the International Stem Cell Initiative. *Nat Biotechnol.* 2007 Jul; 25(7): 803- 816.
- 2006:** Aflatoonian B. and Moore H. Germ cells from mouse and human embryonic stem cells. *Reproduction.* 2006 Nov; 132(5): 699- 707.
- 2005:** Aflatoonian B. and Moore H. Human primordial germ cells and embryonic germ cells, and their use in cell therapy. *Curr Opin Biotechnol.* 2005 Oct; 16(5):530-5.
- 2005:** Aflatoonian B., Fazeli A., Ruban L., Andrews P. and Moore H. (2005). Human embryonic stem cells differentiate to primordial germ cells as determined by gene expression profiles and antibody markers. Proc. 21st Annual Meeting of the European Society for Human Reproduction and Embryology, Copenhagen. Human Reproduction 20 (suppl): 1 i6.

### **ORAL PRESENTATIONS**

- 2009:** Aflatoonian B. Stem Cells for Reproductive Medicine. Invited speaker for the Reproductive Medicine 2009 meeting in London in UK (10<sup>th</sup> and 11<sup>th</sup> of September 2009).
- 2008:** Aflatoonian B. and Moore H. Reproductive Medicine and Embryonic Stem Cells. Invited speaker for the 1<sup>st</sup> International Symposium and Workshop on Clinical Embryology, Yazd, Iran (22<sup>nd</sup> - 24<sup>th</sup> November 2008).

- 2007:** Aflatoonian B., Soleimani M., Aflatoonian R., Aflatoonian A. Stem cells from germline lineage. Yazd 2<sup>nd</sup> International Student Award in Reproductive Medicine, Yazd, Iran (11<sup>th</sup>-13<sup>th</sup> May 2007).
- 2007:** Aflatoonian B. and Moore H. Derivation of human embryonic stem cells. Invited speaker for the CARE Embryology Conference 2007. *Sponsored by Ferring*. Park Plaza Hotel. Nottingham. UK (24<sup>th</sup> and 25<sup>th</sup> of February 2007).
- 2006:** Aflatoonian B. and Harry Moore. Human embryonic germ cells; current status and future aspects. Invited speaker for the 2<sup>nd</sup> National Stem Cell Congress in Trabzon in Turkey (6-9 September 2006).
- 2006:** Aflatoonian B. and Moore H. Microdrop method for derivation of human embryonic stem cell lines. Invited Speaker during the MRC/BBSRC training workshop “Working with Human Embryonic Stem Cell Lines”. Centre for Stem Cell Biology, University of Sheffield. Sheffield, UK (4<sup>th</sup> -10<sup>th</sup> July 2006).
- 2006:** Aflatoonian B., Ruban L., and Moore H. A microdrop method for derivation of human embryonic stem cells. Society for Reproduction and Fertility Conference 2006 and National Ovarian Workshop. University of Leeds, UK (3<sup>rd</sup> -5<sup>th</sup> July 2006).
- 2005:** Aflatoonian B., Aflatoonian R., Ruban L., Jones M., Fazeli A., and Moore H. Potential of human embryonic stem cells to differentiate to primordial germ cells *in vitro*. Yazd 1<sup>st</sup> International Student Award in Reproductive Medicine, Yazd, Iran (December 2005).
- 2005:** Aflatoonian B., Fazeli A., Ruban L., Andrews P. and Moore H. Human embryonic stem cells differentiate to primordial germ cells as determined by gene expression profiles and antibody markers. Presented in ESHRE 2005 in Copenhagen in Denmark (19-22 Jun 2005).
- 2005:** Aflatoonian B., Ruban L., Fazeli A., and Moore H. Differentiation of Human Embryonic Stem Cells to Primordial Germ Cells *in vitro*. Fertility 2005, International Meeting on Reproduction in Warwick, UK (2-5 April 2005).
- 2004:** Aflatoonian B., Ruban L., Fazeli A., and Moore H. Differentiation of human embryonic stem cells to primordial germ cells. UK Stem Cell Joint Laboratory Meeting in Cambridge in UK.

**POSTER PRESENTATIONS**

- 2012:** Anbari F, Khalili MA, Bahrami AR, Mahdavi shahri N, Aflatoonian B., Khoradmehr A, Sadeghian F, Fesahat F. Intravenous administration of mesenchymal stem cells improve functional recovery after traumatic brain injury in rats", September 2012. 8<sup>th</sup> Royan International Congress on stem cell biology & technology, Tehran, Iran.
- 2011:** Aflatoonian B., Soleimani M., Fesahat F., Sadeghian F., Aflatoonian A. *In vitro* generation of putative mesenchymal stem cells from testicular sperm extraction samples. 44th Annual meeting of the Society for the Study of Reproduction (SSR) in Portland, Oregonin USA (31<sup>st</sup> 4<sup>th</sup> July 2011).
- 2011:** Aflatoonian B., Fesahat F., Sadeghian F., Aflatoonian A., Khorad-Mehr A., Aflatoonian A. Late passage human foreskin fibroblasts support human embryonic stem cells in culture. 9<sup>th</sup> Annual Meeting of International Society for Stem Cell Research (ISSCR2011) in Toronto in Canada (15<sup>th</sup>-18<sup>th</sup> June 2011).
- 2011:** Aflatoonian B., Sadeghian F., Fesahat F., Soleimani-Salehabadi M., Aflatoonian N. Embryonic stem cell like cells from human foreskin. 9<sup>th</sup> Annual Meeting of International Society for Stem Cell Research (ISSCR2011) in Toronto in Canada (15<sup>th</sup>-18<sup>th</sup> June 2011).
- 2011:** Aflatoonian B., Sadeghian F., Fesahat F., Khorad-Mehr A., Janan A., Aflatoonian Reza., Aflatoonian A. The transdifferentiation of the human foreskin fibroblasts to form germ cells using retinoic acid. 9<sup>th</sup> Annual Meeting of International Society for Stem Cell Research (ISSCR2011) in Toronto in Canada (15<sup>th</sup>-18<sup>th</sup> June 2011).
- 2009:** Aflatoonian B., Raina T., Francis Sheila., Walsh J., Whitehouse. S., Al-Lamee Kadem., Gunn Julian., Moore Harry. Development of cell-coated regenerative stents to treat coronary heart disease. 7<sup>th</sup> Annual Meeting of International Society for Stem Cell Research (ISSCR2009) in Barcelona in Spain (8<sup>th</sup>-11<sup>th</sup> July 2009).
- 2009:** Aflatoonian B., Soleimani M., Fesahat F., Sadeghian F., Aflatoonian A. Introducing Yazd1; a new human embryonic stem cell line. 7<sup>th</sup> Annual Meeting of International Society for Stem Cell Research (ISSCR2009) in Barcelona in Spain (8<sup>th</sup> - 11<sup>th</sup> July 2009).

- 2009:** Aflatoonian B., Aflatoonian R., Ruban L., Fazeli A. and Moore H. D. Embryoid bodies from human embryonic stem cells for niche for male germ cell development *in vitro*. 9<sup>th</sup> International Congress of Andrology (ICA2009) in Barcelona in Spain (10<sup>th</sup> - 11<sup>th</sup> March 2009).
- 2008:** Aflatoonian B., Soleimani M., Fesahat F., Sadeghian F., Fazli H., Aflatoonian R., Aflatoonian A. Potential of TESE and PESA samples for derivation of human germline stem cells. The annual meeting of the Society for Reproduction and Fertility (SRF) in Edinburgh University in UK (19<sup>th</sup> June- 1<sup>st</sup> July 2008).
- 2008:** Aflatoonian B., Soleimani M., Fesahat F., Sadeghian F., Fazli H., Aflatoonian R., Aflatoonian A. Derivation of spermatogonial stem cells from TESE and PESA samples. 6<sup>th</sup> Annual Meeting of International Society for Stem Cell Research (ISSCR2008) in Philadelphia in USA (11<sup>th</sup> – 14<sup>th</sup> June 2008).
- 2008:** Aflatoonian B., Soleimani Salehabadi M., Soleimani M., Aflatoonian N., Aflatoonian A. Isolation and culture of multipotent skin-derived precursors from neonatal human foreskin tissue in a co-culture system. 6<sup>th</sup> Annual Meeting of International Society for Stem Cell Research (ISSCR2008) in Philadelphia in USA (11<sup>th</sup> – 14<sup>th</sup> June 2008).
- 2007:** Aflatoonian B., Soleimani M., Aflatoonian A., Aflatoonian N., Aflatoonian R., Aflatoonian A. Isolation, culture and characterisation of gonocytes; a new source for the derivation of pluripotent stem cells? Middle East Fertility Society (MEFS) meeting in Turkey (31<sup>st</sup> of October- 3<sup>rd</sup> of November 2007).
- 2007:** Aflatoonian B., Soleimani M., Aflatoonian A., Aflatoonian N., Aflatoonian R., Aflatoonian A. Culture and characterisation of human embryonic gonocyte stem cells. Autumn meeting of British Society for Developmental Biology (BSDB) in Sheffield in UK (5<sup>th</sup> - 7<sup>th</sup> September 2007).
- 2007:** Aflatoonian B., Soleimani M., Aflatoonian A., Aflatoonian N., Aflatoonian R., Aflatoonian A. Gonocytes; another source of pluripotent stem cells? 5<sup>th</sup> Annual Meeting of International Society for Stem Cell Research in Cairns in Australia (17<sup>th</sup> -21<sup>st</sup> June 2007).
- 2006:** Aflatoonian B., Ruban L., Moore H. A Comparison of the Derivation and Characterisation of Human Embryonic Stem Cells and Putative Embryonic Germ Cells. 4<sup>th</sup> Annual Meeting

- of International Society for Stem Cell Research in Toronto in Canada (29<sup>th</sup> June- 2<sup>nd</sup> July 2006).
- 2006:** Aflatoonian B., and Moore H. The Derivation and Characterisation of Human Embryonic Stem Cells and Human Embryonic Germ Cells. Presentation day 2006 of School of Medicine in University of Sheffield in Sheffield in UK (10<sup>th</sup> July 2006).
- 2005:** Aflatoonian B., and Moore H. Differentiation of Human Embryonic Stem Cells to Primordial Germ Cells as Determined by Gene Expression and Antibody Markers. Research Day 2005 School of Medicine and Biomedical Sciences in University of Sheffield in Sheffield in UK (June 2005).
- 2004:** Aflatoonian B., and Moore H. The Derivation of Human Embryonic Stem (hES) Cells from Human Embryos and their Differentiation to Primordial Germ Cells (PGCs) and Gametes. Presentation day 2004 of School of Medicine in University of Sheffield in Sheffield in UK (July 2004).
- 2004:** Aflatoonian B., and Moore H. The Derivation of New Human Embryonic Stem (hES) Cell Lines and their Differentiation to Primordial Germ Cells (PGCs) and Germ Cells. 12<sup>th</sup> Iranian Researchers Conference in Europe (IRCE). Manchester, UK (3<sup>rd</sup> and 4<sup>th</sup> July 2004).

#### **ABSTRACTS PRESENTED IN CONFERENCES (CO-AUTHOR)**

- 2009:** Moore H., Pacey A., Aflatoonian B., and Erickson K. Identification of human sperm-binding peptide motifs using a combinatorial OBOC bead library. 9<sup>th</sup> International Congress of Andrology (ICA2009) in Barcelona in Spain (10<sup>th</sup>- 11<sup>th</sup> March 2009).
- 2009:** Chow L., Aflatoonian B., Moore H. D., and Paley M. N. Investigating DNP markers for stem cell tracking at low field. Presented as E-Poster (1524) in International Society for Magnetic Resonance in Medicine (ISMRM 2009) in Hawaii in USA (19<sup>th</sup>- 21<sup>st</sup> April 2009).
- 2006:** Aflatoonian A., Mahani I.M., Tabibnejad N., Aflatoonian B., and Aflatoonian R. Comparison of coasting with aspiration half of follicles before HCG injection for prevention of OHSS in ART. Presented in ESHRE 2006 in Prague in Czech Republic (18<sup>th</sup> -21<sup>st</sup> June 2006).

- 2006:** Moore H. and Aflatoonian B. Human embryonic stem cells differentiate to primordial germ cells. Serono Symposia International Foundation; Therapeutic potential of stem cells in reproductive medicine. In Valencia in Spain (March 31<sup>st</sup> - April 1<sup>st</sup> 2006).
- 2002:** Aflatoonian A., Davar R., Aflatoonian R., Aflatoonian B. Comparison between microdose GnRH-a and long protocol in 265 infertile couples who enrolled for ART cycles for the first time. Abstract book of 9<sup>th</sup> annual meeting of Middle East Fertility Society (MEFS) in Cairo in Egypt (October 30<sup>th</sup> - November 2<sup>nd</sup> 2002).
- 2002:** Aflatoonian A., Davar R., Aflatoonian R., Aflatoonian B. Aromatase inhibitors doesn't effect on Clomiphene resistant PCOS patients. Presented in ESHRE 2002 in Vienna in Austria (2002).
- 2001:** Aflatoonian A., Kalantar S.M., Aflatoonian R., Amir-Arjmand M.H., Soleimani M., Aflatoonian B. Does double embryo transfer following AZH improve the pregnancy rate in ART? Middle East Fertility Society Journal. Volume 6, November 2001.

#### **CHAPTER OF BOOK**

- 2012:** Aflatoonian B. and Moore H. Chapter 7: Pluripotent stem cells *in vitro* from human primordial germ cells. In: Human Embryonic and Induced Pluripotent Stem Cells: Lineage-Specific Differentiation Protocols. Eds. Ye K., and Jin S. Springer Protocols Handbooks.
- 2007:** Moore H. and Aflatoonian B. From stem cells to spermatozoa and back. (2007). In: Spermatology (SRF vol. 65; proceedings of the 10th international symposium on spermatology held at El Escorial, Madrid, Spain, 17- 22 September 2006) pp19-32. Eds. Roldan E.R.S., and Gomendio M., Nottingham University Press, United Kingdom.