**Curriculum Vitae Elements** 



NAME:

ADDRESS:

Hooman Sadri-Ardekani, M.D, Ph.D.

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## **ACADEMIC EDUCATION & TRAINING:**

9/1991-2/1999	Shahid Beheshti Medical University (SBMU), Tehran, Iran M.D.
4/1999-8/2003	Family Medicine, Academic Center for Education, Culture and Research (ACECR) - Shahid Beheshti Medical University (SBMU) branch, Tehran, Iran
9/2003-2/2007	Fellow/Faculty, Male Reproductive Medicine and Surgery Avicenna Infertility Center, ACECR, Tehran, Iran
3/2007-12/2012	University of Amsterdam, Amsterdam, The Netherlands Ph.D. Research Advisor(s): Sjoerd Repping, Ph.D. & Fulco van der Veen, M.D, Ph.D. Thesis: Spermatogonial Stem Cell Autotransplantation, toward clinical application
1/2012-5/2016	Postdoctoral Fellow, Wake Forest Institute for Regenerative Medicine (WFIRM), Wake Forest School of Medicine, North Carolina
	Research Advisor: Anthony Atala, M.D. Research Project: <i>Regenerative Medicine in the field of Male</i> <i>Reproduction</i>
9/2014-5/2016	Fellow, Male Reproductive Medicine and Surgery Department of Urology, School of Medicine, Wake Forest Baptist Health University, North Carolina

**PROFESSIONAL LICENSURE** (*List in chronological order all professional (e.g. medical) licensures including license number, and whether licenses in other states are inactive*):

1999-Present	Medical, Tehran, Iran
2014-present	Clinical Genetics, Tehran, Iran
2014-present	Medical, State of North Carolina, # 196643

#### EMPLOYMENT:

## **Academic Appointments:**

4/2014-Present	Faculty at Graduate School of Arts & Sciences, Wake Forest University
4/2014-5/2016	Instructor, Department of Urology
6/2016-Present	Assistant Professor, Wake Forest Institute for Regenerative Medicine (WFIRM) & Department of Urology, Wake Forest School of Medicine, North Carolina
2003-Present (Holding Position)	Instructor/Assistant Professor, Reproductive Biotechnology Research Center, Avicenna Research Institute, the Academic Center for Education, Culture and Research (ACECR)

#### EXTRAMURAL APPOINTMENTS AND SERVICE

#### **Journal Reviewer:**

	Blood and Lymphatic Cancer-Targets and Therapy BMC Urology Cellular Reprograming Human Reproduction Journal of Andrology & Gynaecology Journal of Cellular Physiology Journal of Cellular Physiology Journal of Reproduction and Infertility Journal of Regenerative Medicine PLosOne Methods (guest editor, special issue) Stem Cell research International Stem cell research and therapy Translational Andrology and Urology
<u>Editorial Boards:</u>	Journal of Reproduction and Infertility, 2012- Present Journal of Andrology & Gynaecology, 2014-Present SRL Urology, 2015-Present Caspian J Reprod Med 2016-Present

<u>Other</u> :	Symposium Organizer: Iranian Hospitals Quality promotion Conference, 1996, Tehran Reproductive Endocrinology and Infertility conference, 1999, Tehran 8th Iranian Congress on Infectious Diseases and Tropical Medicine" 2000, Tehran Reproductive Genetic & biotechnology conference, 2000, Tehran Environmental factors and infertility Conference, 2002, Tehran Comprehensive Conference on Abortion in Iran, 2002, Kermanshah Immunological Aspects of Fertility and Infertility, 2004, Tehran Sexual Health in Reproductive Health Conference 2005, Tehran The Second Iranian conference on Gamete & Embryo Donation in Infertility Treatment" 2006, Tehran
ROFESSIONAL MEMBERSHIPS:	
1999-Presen 2004-Present 2006-Present	Iran Family Planning Association (member of International Planned Parenthood Federation "IPPF") European Society of Human Reproduction & Embryology (ESHRE)
2006-Present 2010-Present 2010-Present 2010-Present	European Academy of Andrology (EAA) American Society for Reproductive Medicine (ASRM) Society for Male Reproduction and Urology (SMRU) Fertility Preservation Special Interest Group, American Society for Reproductive Medicine (ASRM)
2012-Present	Tissue Engineering International and Regenerative Medicine Society (TERMIS)
2012-Present 2013-Present 2015-Present 2015-Present 2013-Present 2015-Present	Iranian Society of Embryology & Reproductive Biology (ISERB) American Society of Andrology (ASA) American Urological Association (AUA) Endocrine Society Diversity Committee (Chair), American Society of Andrology (ASA) Trainee Committee, American Society of Andrology (ASA)

# HONORS AND AWARDS:

2009	Nominated for the Fertility Society of Australia Exchange Award ESHRE
2010	AMC Promovendivereniging research pitch
2010	AMC Young scientist publication 2009 award (first prize)
2010	11th Royan International Research Award, Stem Cells and
	Developmental Biology field, September 2010
2010	Nominated for Scientific Program Paper Prize – ASRM 2010
2010	Jan Swammerdam Fertility Prize 2010
2012	The 17th Razi research Festival award on medical science
2015	AUA early career investigators training award
2015	Gold Award Fellow Basic Science, Surgical Sciences, Twenty-Third Annual Residents' and Fellows Research Day, Wake Forest School of Medicine

# INVITED PRESENTATIONS AND SEMINARS (\*GRAND ROUNDS):

- "Attitude measurement of General Practitioners about ranking of the infectious diseases and their ability for its management" (" 8th Iranian Congress on Infectious Diseases and Tropical Medicine", Jan 2000, Tehran, Iran)
- 2. "Effects of most common pesticides on reproduction in Iran", (Environmental factors and infertility Conference, Jan 2002, Tehran, Iran)
- 3. "Evaluation of environmental factors effects on fertility from Iranian Infertility experts' point of view" (Environmental factors and infertility Conference, Jan 2002, Tehran, Iran)
- 4. "Effect of time on antisperm antibody production in vasectomised male (12th International Congress of Immunology and 4h Annual Conference of FOCIS Montreal, Canada, July, 18-23, 2004)
- "Production of monoclonal antibody against surface antigens of human spermatozoa (3rd European Congress of Andrology and 16th Annual Congress of the German Society of Andrology, Munster, Germany, Sept 2004)
- "Andropase status in Male reproductive Health" (Sex Health in reproduction conference, March 2005 Tehran- Iran)
- Comparison Semen Parameters and two sperm chromatin structure assay (SCSA) tests" as routine diagnostic test for evaluation Male Factor (International Molecular Andrology workshop, Oct 7-9, 2005, Giessen, Germany)
- 8. "Sperm ubiquitination as a function test correlates with semen parameters" (International Molecular Andrology workshop, Oct 7-9, 2005, Giessen, Germany)
- "Sperm bank and preserving the reproductive potential: current concepts and future prospects" (The 6th International Congress on Obstetrics & Gynecology, 2005 Tehran, Iran)
- 10. "Comparison routine semen analysis & two sperm chromatin structure assay tests in evaluation male factor infertility "(The 6th International Congress on Obstetrics & Gynecology, 2005 Tehran, Iran)
- 11. "Effect of time on antisperm antibody production in vasectomized male" (The 6th International Congress on Obstetrics & Gynecology, 2005 Tehran, Iran)
- "The assessment and comparison of different media and methods of sperm cryopreservation"(14th European Workshop on Molecular and Cellular Endocrinology of the Testis, 2006 Bad Aibling, Bavaria Germany)
- 13. "ART as a safe technique for HIV couples" (International Seminar of AIDS, 2006 Tehran, Iran)
- 14. "The role of laparoscopy in the management of azoospermic men with Non-palpable testis" (13th International Congress of Fertility and Infertility, 2007 Tehran, Iran)
- 15. "Possible formation of Embryonic stem cell like cells from Spermatogonial stem cells in vitro" (EuroSTELS workshop: challenges in stem cell differentiation and transplantation 30 September-3 October 2007, Milan, Italy)

- "Testicular expression of testis specific gene A10 (TSGA10) mRNA in patients with non-obstructive Azoospermia" (7th Congress of the European Society of Gynecology, OCTOBER 10-13, 2007 PARIS -FRANCE)
- "Testicular expression of testis specific gene A10 (TSGA10) mRNA in patients with non-obstructive azoospermia" (7th Congress of the European Society of Gynecology, OCTOBER 10-13, 2007 PARIS -FRANCE)
- 18. "Semen quality of smoker and non-smoker men in infertile couples" (7th International Congress on Obstetrics and Gynecology, 2007 Tehran, Iran)
- 19. "A molecular survey on genitourinary Chlamydia Trachomatis infection in men"16th Iranian Congress on Infectious Diseases and Tropical Medicine, 2007 Tehran, Iran)
- 20. "Culture of male germ line stem cells from human testes for transplantation" (EuroSTELS workshop: Stem cell Niches, 10-12 January 2008 ,Barcelona ,Spain)
- 21. "Spermatogonial stem cells and their robust potentials" (EuroSTELS workshop: Stem cell Niches, 10-12 January 2008, Barcelona, Spain).
- 22. "Successful propagation of human spermatogonial stem cells in vitro" (ESHRE, 28June-1July 2009, Amsterdam, The Netherlands): Nominated for the Fertility Society of Australia Exchange Award.
- 23. "Attitude of Iranian parents about semen/ testicular tissue cryopreservation in boys with cancer" (1st Congress on Fertility Preservation, 2010, Tehran, Iran).
- 24. "Evaluation of infertiles' attitude and knowledge toward smoking"(1st Congress on Fertility Preservation, 2010, Tehran, Iran).
- 25. "Propagation of human spermatogonial stem cells in vitro" (6th Royan International Congress on Stem Cell Biology & Technology, 2010 Tehran, Iran)
- 26. "Successful propagation of human prepubertal spermatogonial stem cells"(ASRM, 23-27<sup>th</sup> October 2010, Denver, Colorado, USA): Nominated for Scientific Program Paper Prize
- 27. "Characterization of In Vitro propagated Human Spermatogonial Stem Cells (SSCs) prior to autotransplantation" (American Urological Association annual meeting, 2013 San Diego, CA, USA)
- 28. "Xenotransplantation model of human spermatogonial stem cells (SSCs) to cynomolgus monkeys' testes- a feasibility study" (TERMIS America, 13-16<sup>th</sup> Dec 2014, Washington DC, USA)
- 29. "Multicellular Human Testicular Organoid: A Novel In Vitro Germ Cell and Testicular Toxicity Model", (American Testis Workshop and ASA 40<sup>th</sup> annual meetings, 15-21 April 2015 Salt Lake City, UT, USA)
- 30. \*"Male Fertility Preservation options current state-of-the art and future implications", (May 11<sup>th</sup> 2015 Mount Sinai Urology Grand Round, Toronto)
- 31. "Removal of malignant cells prior to spermatogonial stem cell autotransplantation", (The 4th World Congress of International Society for Fertility Preservation, Nov 13-15<sup>th</sup> 2015, Shanghai, China)
- 32. \*"Male Fertility Preservation options current state-of-the art and future implications", (Sep 30th 2015 Wake Forest Pathology Grand Round, Winston Salem)

- 33. "A Multidisciplinary Model of Early Fertility Preservation in Klinefelter Patients: Description of a Program
  - " (2nd International Workshop on Klinefelter Syndrome March 10–12, 2016 Münster, Germany)
- 34. "A multidisciplinary model for experimental testicular tissue banking to generate spermatogenesis in the future using traditional & electronic medical record alert systems: description of a program" (ASA 41<sup>st</sup> annual conference April 2 5, 2016 New Orleans New Orleans, LA)
- 35. "Human Spermatogonial Cells Stability After 24 Hours Transportation And Freeze-thaw" (ASA 41<sup>st</sup> annual conference April 2 5, 2016 New Orleans New Orleans, LA)
- 36. \*"Spermatogonial Stem Cell Technology & Regenerative Medicine", (April 27th 2016, University of Pennsylvania Center for Research on Reproduction and Women's Health, Philadelphia)

# **BIBLIOGRAPHY:**

# Peer-Reviewed Journal Articles:

- 1. Ahmed, E. A., Barten-van Rijbroek, A. D., Kal, H. B., **Sadri-Ardekani, H.**, Mizrak, S. C., van Pelt, A. M. de Rooij, D. G. (2009). Proliferative Activity in Vitro and DNA Repair Indicate that Adult Mouse and Human Sertoli Cells Are Not Terminally Differentiated, Quiescent Cells. BIOLOGY OF REPRODUCTION, 80, 1084–109.
- Sadri-Ardekani, H., Mizrak, S. C., van Daalen, S. K., Korver, C. M., Roepers-Gajadien, H. L., Koruji, M., Hovingh, S., de Reijke, T. M., de la Rosette, J. J., van der Veen, F., de Rooij, D. G., Repping, S. and van Pelt, A. M. (2009). Propagation of human spermatogonial stem cells in vitro. JAMA, 302 (19), 2127-2134.
- 3. Mizrak, S. C., Chikhovskaya, J. V., **Sadri-Ardekani, H.**, van Daalen, S., Korver, C. M., Hovingh, S. E., Roepers-Gajadien, H. L., Raya, A., Fluiter, K., de Reijke, T. M., de la Rosette, J. J., Knegt, A. C., Belmonte, J. C., van der Veen, F., de Rooij, D. G., Repping, S. and van Pelt, A. M. (2010). Embryonic stem cell-like cells derived from adult human testis. Hum Reproduction, 25(1), 158-67.
- Aryanpur, M., Heydari, G., Tarahomi, M., Akhondi, M.A., Sadri-Ardakani, H., Masjedi, M.R. (2010). How effective is Brief Smoking Cessation Counselling in Infertile Couples? Journal of Family and Reproductive Health, 4(1):35-39)
- Ghorbani, B., Madahi, P., Shirazi, E., Sadri-Ardekani, H., Kamali, K. (2011). Iranian Oncologists' Attitude towards Fertility Preservation in a Sample Group. Journal of Reproduction & Infertility, 12(1), 33-36.
- 6. **Sadri-Ardekani, H.**, Akhondi, M. A., van der Veen, F., Repping, S. and van Pelt, A. M (2011). In Vitro Propagation of Human Prepubertal Spermatogonial Stem Cells .JAMA, 305 (23), 2416-2418.
- Sadri-Ardekani, H., Akhondi, M., M.Vossough, P., Maleki, H., Sedighnejad, S., Kamali, K., Ghorbani, B., van Wely, M., van der Veen, F. and Repping, S. (2013). Parental attitudes toward fertility preservation in boys with cancer: context of different risk levels of infertility and success rates of fertility restoration. Fertility Sterility 99 (3): 796–802.
- 8. **Sadri-Ardekani, H.**, Homburg, C. H., van Capel, T. M., van den Berg, H., van der Veen, F., van der Schoot, C. E., van Pelt, A. M. and Repping, S. (2014). Eliminating acute lymphoblastic leukemia cells from human testicular cell cultures: a pilot study. Fertility Sterility 101(4):1072-1078
- 9. Nickkholgh, B., Mizrak, SC., van Daalen, SK., Korver, CM., **Sadri-Ardekani, H.**, Repping, S. and van Pelt AM (2014). Genetic and epigenetic stability of human spermatogonial stem cells during long-term culture. Fertility Sterility 102(6):1700-1707
- 10. **Sadri-Ardekani H**, Atala A. (2014) Testicular tissue cryopreservation and spermatogonial stem cell transplantation to restore fertility: from bench to bedside. Stem Cell Res Therapy 28;5(3):68
- 11. **Sadri-Ardekani H,** Atala A. (2015) Regenerative medicine for the treatment of reproductive system disorders: current and potential options. Adv Drug Deliv Rev. 82-83:145-52.
- 12. **Sadri-Ardekani H,** McLean TW, Kogan S, Sirintrapun J, Crowell K, Yousif MQ, Hodges SJ, Petty J, Pranikoff T, Sieren L, Zeller K, Atala A. (2016) Experimental testicular tissue banking to generate spermatogenesis in the future: A multidisciplinary team approach. Methods 15;99:120-7.
- 13. Galdon G, Atala A, **Sadri-Ardekani H**. (2016) In Vitro Spermatogenesis: How Far from Clinical Application? Curr Urol Rep 17(7):49.

# Invited Book Chapters/Reviews:

- 1. **Sadri-Ardekani, H.** and Atala A. (2014) .Testicular tissue cryopreservation and spermatogonial stem cell transplantation to restore fertility: from bench to bedside. Stem Cell Research & Therapy 28;5(3):68
- 2. **Sadri-Ardekani**, **H.** and Atala A. (2014). Regenerative medicine for the treatment of reproductive system disorders: Current and potential options. Adv Drug Deliv Rev. [Epub ahead of print]
- 3. **Sadri-Ardekani, H.** and Atala A. (2015)Regenerative Medicine and Cell Therapy: Past, Present, and Future. "Stem Cell Nanoengineering", John Wiley & Sons Incorporation.

## Books:

- "New Program for General Practitioners (Medical Students) Education" Shaheed Beheshti University of medical Sciences & Health Services Publication, 2004
- 2. "Assisted Reproductive Technology (ART)", Avicenna Research Institute Publication, 2005
- 3. "183 Questions and Answers about pregnancy", Nick-Ayeh & Teimorzadeh publications, 2006
- 4. "Helping people with Sexual Problems", Avicenna Research Institute Publication, 2009

## GRADUATE STUDENTS/RESIDENTS/FELLOWS ADVISED:

Undergraduate and medical students:

4/2013-5/2013	Anish Mitra, University of British Columbia (visiting Wake Forest
3/2013-7/2015	Hammad Ahmed (Bio 391 & 392)
9/2013-Present	Sarah Fine (Bio 391 & 392)

Summer Students (Undergraduate):

5/2013-8/2013	David Sohutskay
5/2014-8/2014	Katherine Katsivalis
6/2016-Present	David Pedersen
Graduate Students:	
6/2013-6/2016	<b>Samuel Pendergraft</b> , PhD Candidiate Molecular Medicine Graduate Program Co-Mentor, Thesis Committee member
Postdoctoral Fellows: 5/2015-Present	<b>Guillermo Galdon Lopez</b> , MD Postdoctoral research fellow
Postdoctoral Fellows:	Nima Pourhabibi Zarandi, MD
4/2016-Present	Postdoctoral research fellow

## **MEDICAL SCHOOL COURSES:**

Endocrinology and Reproduction (Year 2), Male Pelvic Anatomy, February 2016

## **GRADUATE SCHOOL COURSES:**

IPP 702. Systems Physiology and Pharmacology, Reproduction system Regenerative Physiology, Spring 2015 IPP 702. Systems Physiology and Pharmacology, Reproduction system Regenerative Physiology, Spring 2016

(Revised June 19, 2016)