**Curriculum Vitae**

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**Dr. Hassan Niknejad, PharmD, PhD**

School of Advanced Technologies in Medicine,

Nanomedicine and Tissue Engineering Research Center,

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**دکتر حسن نیک نژاد**

**عضو هیئت علمی**

**دانشکده فناوری های نوین پزشکی**

**دانشگاه علوم پزشکی شهید بهشتی**

**Academic Position:**

**Associate Professor 2014- current**

School of Advanced Technologies in Medicine,

Shahid Beheshti University of Medical Sciences, Tehran, Iran

**Assistant Professor 2009-2014**

Nanomedicine and Tissue Engineering Research Center,

Shahid Beheshti University of Medical Sciences, Tehran, Iran

**فعالیت های اجرایی:**

* عضو هیئت علمی دانشگاه علوم پزشکی شهید بهشتی از 1388 تاکنون
* رئیس دانشکده فناوری های نوین پزشکی سال 1392 الی 1394
* معاونت پژوهشی مرکز تحقیقات نانوتکنولوژی پزشکی و مهندسی بافت سال 1389 الی 1391
* قائم مقام رئیس مرکز تحقیقات نانوتکنولوژی پزشکی و مهندسی بافت سال 1391 الی 1392
* عضو برد تخصصی مهندسی بافت و سلول درمانی وزارت بهداشت سال 93 تاکنون
* مسئول المپیاد پزشکی دانشجویان دانشگاه علوم پزشکی شهید بهشتی
* مدیر عامل شرکت دانش بنیان زیست فناوران نیلفر از سال 1393 تاکنون
* مدیرعامل شرکت دانش بنیان یاوندان اندیشه از سال 1388 الی 1392
* مدیر مسئول و سردبیر مجله پزشکی داروپزشک
* مسئول فنی داروخانه های دانشکده داروسازی دانشگاه علوم پزشکی تهران از سال 1377 تا 1382

**زمینه های تحقیقاتی:**

سلول های بنیادی، سلول درمانی، مهندسی بافت، دارورسانی، نانوتکنولوژی، سرطان، علوم اعصاب، پزشکی بازساختی (پوست، چشم، قلب و عروق و نازایی)

**Other Personal Information:**

Date of Birth: 21 Sep 1975

Gender & Marital: Male, Married

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**Education:**

**1995-2002**

Tehran University of Medical Sciences, Doctor of Pharmacy (Pharm.D.)

**Thesis:** Investigation of interaction between nitric oxide and ATP-dependent potassium channel in isolated rat atria

**2002-2008**

Shahid Beheshti University of Medical Sciences, PhD

The effects of designed Nano-matrix on dopaminergic differentiation of amniotic epithelial stem cells

**Award:**

First Rank of Research Festival in Shahid Beheshti University of Medical Sciences (Year of award: 2014)

**Research interest:**

Stem cells

Cancer

Tissue Engineering

Regenerative Medicine

Angiogenesis

Medical Nanotechnology

Drug Delivery

**Publications:**

**Book**

Hassan Niknejad (2012). Application of Embryonic Stem Cells in Parkinson’s Disease, Mechanisms in Parkinson's Disease - Models and Treatments, Dr. Juliana Dushanova (Ed.), ISBN: 978-953-307-876-2, InTech, DOI: 10.5772/24400.

**Patents**

1. Production of albumin nanoparticles without toxicity of glutaraldehyde.
2. Artificial skin through in situ differentiation of amniotic cells
3. Extraction of anti-cancer ingredients from human placenta
4. High-Yield production of collagen type I and IV from human placenta
5. Biocompatible paclitaxel-conjugated albumin nanoparticles

**Articles**

1. Kakavand, M., Yazdanpanah, G., Ahmadiani, A., Niknejad, H. Blood compatibility of human amniotic membrane compared with heparin-coated ePTFE for vascular tissue engineering. **J Tissue Eng Regen Med** (2015) [Artcile in press], DOI: 10.1002/term.2064
2. Niknejad H, Yazdanpanah G, Ahmadiani A. Induction of apoptosis, stimulating cell-cycle arrest and inhibition of angiogenesis make human amnion-derived cells as promising sources for cell therapy of cancer. **Cell Tissue Research** 2016. DOI: 10.1007/s00441-016-2364-3 [Article in press].
3. Tabatabaei Rezaei, S.J., Amani, V., Nabid, M.R., Safari, N., Niknejad, H. Folate-decorated polymeric Pt(ii) prodrug micelles for targeted intracellular delivery and cytosolic glutathione-triggered release of platinum anticancer drugs. **Polymer Chemistry** 2015, 6 (15), pp. 2844-2853.
4. Niknejad H, Yazdanpanah G. Anticancer effects of human amniotic membrane and its epithelial cells. **Medical hypotheses** 82 (4), 488-489.
5. Yazdanpanah, G., Paeini-Vayghan, G., Asadi, S., Niknejad, H. The effects of cryopreservation on angiogenesis modulation activity of human amniotic membrane. **Cryobiology** 2015; 71: 413-418
6. Niknejad H, Khayat-Khoei M, Peirovi H, Abolghasemi H. Human amniotic epithelial cells induce apoptosis of cancer cells: a new antitumor therapeutic strategy. **Cytotherapy** 2014, 16 (1), pp. 33-40.
7. Masoumi S, Jamili S, Niknejad H, Mashinchian A. Toxic effects of Nanosilver on Red Blood Cells (RBC) and liver tissue of common carp (Cyprinus carpio). **J animal environment** 2014, 6(4), 177-185.
8. SJT Rezaei, HS Abandansari, MR Nabid, H Niknejad. pH-responsive unimolecular micelles self-assembled from amphiphilic hyperbranched block copolymer for efficient intracellular release of poorly water-soluble anticancer drugs. **Journal of colloid and interface science** 2014, 425, 27-35.
9. Niknejad H, Yazdanpanah G, Mirmasoumi M, Abolghasemi H, Peirovi H, Ahmadiani A. Inhibition of HSP90 could be possible mechanism for anti-cancer property of amniotic membrane. **Med Hypotheses**. 2013 Nov;81(5):862-5. doi: 10.1016/j.mehy.2013.08.018. Epub 2013 Aug 30.
10. Tehrani FA, Ahmadiani A, Niknejad H. The effects of preservation procedures on antibacterial property of amniotic membrane. **Cryobiology**. 2013 Dec;67(3):293-8. doi: 10.1016/j. cryobiol.2013.08.010. Epub 2013 Aug 26.
11. Niknejad H, Deihim T, Peirovi H, Abolghasemi H. Serum-free cryopreservation of human amniotic epithelial cells before and after isolation from their natural scaffold. **Cryobiology**. 2013 Aug;67(1):56-63. doi: 10.1016/j.cryobiol.2013.05.001. Epub 2013 May 16.
12. Niknejad H, Paeini-Vayghan G, Tehrani FA, Khayat-Khoei M, Peirovi H. Side dependent effects of the human amnion on angiogenesis. Placenta. 2013 Apr;34(4):340-5. doi: 10.1016/j.**placenta**.2013.02.001. Epub 2013 Mar 7.
13. Rezaei SJ, Nabid MR, Niknejad H, Entezami AA. Folate-decorated thermoresponsive micelles based on star-shaped amphiphilic block copolymers for efficient intracellular release of anticancer drugs. **Int J Pharm**. 2012 Nov 1;437(1-2):70-9. doi: 10.1016/j.ijpharm.2012.07.069. Epub 2012 Aug 4.
14. Peirovi H, Rezvani N, Hajinasrollah M, Mohammadi SS, Niknejad H. Implantation of amniotic membrane as a vascular substitute in the external jugular vein of juvenile sheep. **J Vasc Surg**. 2012 Oct;56(4):1098-104. doi: 10.1016/j.jvs.2012.02.036. Epub 2012 May 5.
15. Niknejad H, Khayat-Khoei M, Peirovi H. Inhibition of MMPs might increase anticancer properties of amniotic epithelial cells. **Med Hypotheses**. 2012 May;78(5):690-1. doi: 10.1016/j.mehy.2012.02.014. Epub 2012 Mar 7.
16. Niknejad H, Deihim T, Ahmadiani A, Jorjani M, Peirovi H. Permanent expression of midbrain dopaminergic neurons traits in differentiated amniotic epithelial cells. **Neurosci Lett.** 2012 Jan 6;506(1):22-7. doi: 10.1016/j.neulet.2011.10.038. Epub 2011 Oct 21.
17. Niknejad H, Deihim T, Solati-Hashjin M, Peirovi H. The effects of preservation procedures on amniotic membrane's ability to serve as a substrate for cultivation of endothelial cells. **Cryobiology**. 2011 Dec;63(3):145-51. doi: 10.1016/j.cryobiol.2011.08.003. Epub 2011 Aug 23.
18. Niknejad H, Peirovi H, Ahmadiani A, Ghanavi J, Jorjani M. Differentiation factors that influence neuronal markers expression in vitro from human amniotic epithelial cells. **Eur Cell Mater**. 2010 Jan 14;19:22-9.
19. Niknejad H, Peirovi H, Jorjani M, Ahmadiani A, Ghanavi J, Seifalian AM. Properties of the amniotic membrane for potential use in tissue engineering. **Eur Cell Mater**. 2008 Apr 29;15:88-99. Review.
20. Azarpira N, Amini M, Kojuri J, Pasalar P, Soleimani M, Hossein Khani S, Ebrahimi M, Niknejad H, Karimian Z, Lotfi F, Shahabi S, Saadat I, Dehghani MR, Mohagheghi MA, Adibi P, Bagheri Lankarani K. Assessment of scientific thinking in basic science in the Iranian second national Olympiad. **BMC Res Notes**. 2012 Jan 23;5:61. doi: 10.1186/1756-0500-5-61.
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22. Hassan Niknejad; Ghasem Yazdanpanah; Tina Deihim. The effects of cryopreservation and lyophilization on endothelial cells adhesion to human amniotic membrane. The **Journal of Urmia University of Medical Sciences**, Vol. 24(9), Nov 2013.
23. Niknejad H, Moshfegh M, Najafzadeh MJ, Houbraken J, Rezaei S, Zarrini G, Faramarzi MA, Nafissi-Varcheh N. Halotolerant Ability and α-Amylase Activity of Some Saltwater Fungal Isolates. **Iran J Pharm Res**. 2013 Winter;12(Suppl):113-9.
24. HS Abandansari, MR Nabid, SJT Rezaei, H Niknejad. pH-sensitive nanogels based on Boltorn® H40 and poly (vinylpyridine) using mini-emulsion polymerization for delivery of hydrophobic anticancer drugs. **Polymer** 55 (16), 3579-3590.
25. Niknejad, H., Mahmoudzadeh, R. Comparison of different crosslinking methods for preparation of docetaxel-loaded albumin nanoparticles. **Iranian Journal of Pharmaceutical Research** 2015 14 (2), pp. 385-394
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28. Niknejad H, YazdanPanah G, Asee Tehrani F, Paeeni Vayghan G. The effect of cryopreservation and lyophilization on histological and mechanical properties of human amniotic membrane. **Quarterly Journal of Sabzevar University of Medical Sciences**. 2013; 20 (3) :249-258
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33. Hassan Niknejad, Mahsa Khayat-khoei, Ghasem Yazdanpanah, Habibollah Peirovi, Evaluation of cytotoxic effects of condition medium from amniotic epithelial cells on cancer cell lines HeLa and MDA-MB-231. **Physiol Pharmacol**. Volume 17, Number 2 (Summer 2013).
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35. Hassan Niknejad, Habibollah Peirovi.The Effects of Cryopreservation on Epithelial Cells before and After Isolation from Human Amniotic Membrane. **JMUMS** 22 (94), 14-26.
36. Homa Gheybi, Hassan Niknejad & Ali Akbar Entezami. Polymer–metal complex nanoparticles-containing cisplatin and amphiphilic block copolymer for anticancer drug delivery. **Designed Monomers and Polymers** 17 (4), 334-344.
37. Niknejad H, Yazdanpanah G. Opposing effect of amniotic membrane on angiogenesis originating from amniotic epithelial cells. **Journal of Medical Hypotheses and Ideas** 2013, 8 (1), 39-41.
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39. MA Masoumi S., Jamili S., Niknejad H. Effects of Size and Concentration of Nanosilver on Liver Tissue of Common Carp (Cyprinus carpio). **Iran NanoSafety** 2014.
40. Ghodsieh Paeini-Vayghan, Habibollah Peirovi, Hassan Niknejad. Inducing Of Angiogenesis Is The Net Effect Of The Amniotic Membrane Without Epithelial Cells. **J Med Hypo Idea**, 2011, 5:16.
41. Fatemeh Asi Tehrani, Habibollah Peirovi, Hassan Niknejad. Determination of Aantibacterial Effect of the Epithelial and Mesenchymal Surfaces of Amniotic Membrane on Escherichia coli, Staphylococcus aureus. **Qom Univ Med Sci J**. Vol.7, No.4, September - October 2013.
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48. Hassan Niknejad; Ghasem Yazdanpanah; Fatemeh A. Tehrani, Habibollah Peirovi. The effects of epithelial cells on amniotic membrane angiogenic properties using rat aortic ring assay. **Koomesh** J. 15 (3), 372-379.
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56. Yazdanpanah GH , Khayat-Khoei M , Niknejad H. Endothelial Differentiation of Human Amniotic Epithelial Cells. **Cell Journal**. Volume 14,supplement 1,Summer 2012.
57. Kakavand, M., Yazdanpanah, G., Niknejad, H. Evaluation of blood compatibility of amnion epithelial side compared to artificial vessel (Polytetrafluoroethylene). 2015 **Journal of Mazandaran University of Medical Sciences** 25 (131), pp. 67-78
58. M Khayat-Khoei, H Niknejad, G Paeini-Vayghan, F Tehrani. The effects of amniotic membrane on angiogenesis. **J Cell Sci**, 2012, 3 (8), 65.
59. Niknejad H, Yazdanpanag G, Kakavand M, Lavaee Y. Low pH preconditioning of amniotic epithelial cells could improve their viability for stem cell therapy of cancer. **Physiol Pharmacol** 2016. [Article in press]
60. Rezaei SJ, Nabid MR, Niknejad H, Entezami AA. Folate-decorated thermoresponsive micelles based on star-shaped amphiphilic block copolymers for efficient intracellular release of anticancer drugs. **Int J Pharm**. 2012 Nov 1;437(1-2):70-9. doi: 10.1016/j.ijpharm.2012.07.069. Epub 2012 Aug 4.
61. Jamal Tabatabaei Rezaei, S., Amani, V., Reza Nabid, M., Niknejad, H., Notash, B. Folate-decorated polymeric Pt(ii) prodrug micelles for targeted intracellular delivery and cytosolic glutathione-triggered release of platinum anticancer drugs. **Polymer Chemistry** 2015, 6 (15), pp. 2986
62. Deihim T, Yazdanpanah G, Niknejad H. Different light transmittance of placental and reflected regions of human amniotic membrane which could be crucial for corneal tissue engineering**. Cornea** 2016. [Article in press]
63. Bagheri M, Shateri S, Niknejad H, Entezami AA. Thermosensitive biotinylated hydroxypropyl cellulose-based polymer micelles as a nano-carrier for cancer-targeted drug delivery**. Journal of Polymer Research** 2014, 21 (10), 1-15.