

CURRUCULUM VITAE

Amir Zarebkohan



Department address:

Department of Medical Nanotechnology, Faculty of Advanced Medical Sciences, Tabriz
University of Medical sciences, Tabriz, Iran

Tel: (+98 41) 33296157

Cell phone: 09905449299

Email: amirzarebkohan@yahoo.com (alternative: amirzarebkohan59@gmail.com)

Personal Details:

Gender: Male

Date of Birth: 18 July 1980

Gender: Male

Nationality: Iranian

Marital Status: Married

Languages:

Farsi — fluent

English — fluent

Membership:

Iranian society of Nanomedicine

Iranian society of physiology and pharmacology

Education:

- 2009-2016. PhD student in Shahid Beheshti University of Medical Sciences
- 2005- 2008. MSc in Medical Physiology, Tarbiat Modares University
- 2001-2005. BSc in Nursing, Ardebil University of Medical Sciences

Title of PhD Thesis:

Synthesis of a PAMAM dendrimer nanocarrier functionalized by SRL peptide for targeted gene delivery to the brain

First supervisor: **Dr. Bahram Kazemi**

Second supervisor: **Dr. Farhood Najafi**

Title of MSc Thesis:

Effect of Chronic Administration of Morphine on the Gene Expression Level of Sodium-Dependent Vitamin C Transporters in Rat Hippocampus and Lumbar Spinal Cord.

First supervisors: **Dr. Mohammad Javan**

Research Papers

1. Cytotoxicity characteristics of green assisted-synthesized superparamagnetic maghemite (γ -Fe₂O₃) nanoparticles, Alireza Bali Ogholbeyg, Abbas Kianvash, Abdollah Hajalilou, Ebrahim Abouzari-Lotf, **Amir Zarebkohan**, **Journal of Materials Science: Materials in Electronics**, **2018 (impact factor 2.01)**
2. Significant role of cationic polymers in drug delivery systems, Masoud Farshbaf, Soodabeh Davaran, **Amir Zarebkohan**, Nasim Annabi, Abolfazl Akbarzadeh, Roya Salehi, **Artificial cells, nanomedicine, and biotechnology**, **2017 (impact factor 5.6)**
3. Targeted drug delivery based on gold nanoparticle derivatives, Mazaher Gholipourmalekabadi, Mohammadmahdi Mobaraki⁴, Maryam Ghaffari, Aleksandra M. Urbanska, **Amir Zarebkohan**, Vahid Fallah Omrani, Alexander M. Seifalian, **Current Pharmaceutical Design**, **2017 (Impact Factor 2.6)**
4. CT imaging of glioma cancer stem cells by functionalized gold nanorods with CD133 monoclonal antibody, **Amir Zarebkohan**, Jamal Ghorbi, Mohammad hemati, Reza Ahadi, Tahereh Tohidi Moghaddam, Abolhasan Ahmadiani. **(In Progress)**
5. An SRL modified PAMAM dendrimer nanocarrier for gene delivery to the C6 glioma cell line, **Amir Zarebkohan**, Farhood Najafi, Hamid Reza Moghimi, Mohammad Reza Deevband, Mohammad Hemmati, Bahram Kazemi. **Iranian Journal of Pharmaceutical Research, In Press, (Impact factor 1.35)**
6. Synthesis and characterization of a PAMAM dendrimer nanocarrier functionalized by SRL peptide for targeted gene delivery to the brain, **Amir Zarebkohan**, Farhood Najafi, Hamid Reza Moghimi, Mohammad Reza Deevband, Mohammad Hemmati, Bahram Kazemi, **European Journal of Pharmaceutical Sciences**, **2015 (Impact factor 3.8)**
7. Synthesis a novel PEGDGA-coated hPAMAM complex as an efficient and biocompatible gene delivery vector: an in vitro and in vivo study, Mohammad Hemmati, Farhood Najafi, Reza Shirkoohi, Hamid Reza Moghimi, **Amir Zarebkohan**, Bahram Kazemi, **Drug Delivery**, **2015 (Impact factor 6.4)**
8. Synthesis and evaluation glutamic acid-modified hPAMAM complex as versatile gene carriers, Mohammad Hemmati, Bahram Kazemi, Farhood Najafi, **Amir Zarebkohan**, Reza Shirkoohi, **Drug Targeting**, **2015 (Impact factor 2.8)**
9. Effect of Chronic Administration of Morphine on the Gene Expression Level of Sodium-Dependent Vitamin C Transporters in Rat Hippocampus and Lumbar Spinal Cord, **Amir Zarebkohan**, Mohammad Javan, Leila Satarian, Abolhasan Ahmadiani, **Journal of Molecular Neuroscience**, **2009. (Impact factor 2.2)**
10. Possible role for integrins in development of tolerance to analgesic effect of morphine in rats, Jamal Ghorbi, Mohammad Javan, Vahid Sheibani, Leila Satarian, **Amir Zarebkohan**, **Physiology and Pharmacology**, **2007**

11. Cadmium effect on development of tolerance to morphine in rats, Mohammad Amin Sherafat, **Amir Zarebkohan**, Jamal Ghorbi, Sabah Mozafari, Mohammad Javan, **Ogofh Danesh, 2008**
12. Changes in β_1 and β_2 integrins expression in dorsal segment of spinal cord of rats confirmed the inhibitory effect of chronic pain on tolerance to morphine, Jamal Ghorbi, Mohammad Javan, Vahid Sheibani, **Amir Zarebkohan**, **Physiology and Pharmacology, 2008**

Chapter book:

Vitamin C Absorption and Transportation in the Body and its Neuroprotective Effect. **Amir Zarebkohan**, Jamal Ghorbi Naini. Nova Publisher, pp. 167-180. **Advances in Medicine and Biology. Volume 21 Chapters. ISBN: 978-1-61942-792-1**

Congress:

1. New method for detection of parasite DNA in clinical samples by gold nanoparticles. Ali Jebali, **Amir Zarebkohan**, Bahram Kazemi, Mohammad Hosein Sanati, **Iranian clinical and paraclinical laboratory sciences, 2012 (Poster)**.
2. In vitro cytotoxic effect of gold nanoparticles on *Leishmania major*, Ali Jebali, Bahram Kazemi, Hosein Hekmati Moghadam, **Amir Zarebkohan**, **Iranian clinical and paraclinical laboratory sciences, 2012 (Poster)**.
3. Effect of Chronic Administration of Morphine on the Gene Expression Level of Sodium-Dependent Vitamin C Transporters in Rat Hippocampus and Lumbar Spinal Cord. **19th Physiology and Pharmacology Congress**, Shahid Beheshti University of Medical Sciences, Tehran, Iran **2010 (Oral presentation)**.

Research projects:

1. Effect of Chronic Administration of Morphine on the Gene Expression Level of Sodium-Dependent Vitamin C Transporters in Rat Hippocampus and Lumbar Spinal Cord. **Shahid Beheshti University of medical sciences, neuroscience research center. (Done)**
2. Effect of chronic administration of morphine on the gene expression of insulin receptor in rat hippocampus. **Gonabad University of medical sciences. (Done)**

3. CT scan imaging of glioma cancer stem cells by functionalized gold nanorods with CD133 monoclonal antibody. **Shahid Beheshti University of medical sciences, neuroscience research center and nanobiotechnology department of Tarbiat Modares University. (Done)**

4. Synthesis and characterization of a PAMAM dendrimer nanocarrier functionalized by SRL peptide for targeted gene delivery to the brain. **Shahid Beheshti University of medical sciences, Cellular and Molecular research center. (Done)**

5. Synthesis a novel PEGDGA-coated hPAMAM complex as an efficient and biocompatible gene delivery vector: an in vitro and in vivo study. **Shahid Beheshti University of medical sciences, Cellular and Molecular research center. (Done)**

Patents:

1. New method for generating sarcoma model in rats, No: 89/A038118.
2. Synthesis of new toothpaste by hydroxyl apatite nanoparticles and prepolis, No: 89/A002465
3. Synthesis of dermal patch for mild burning, **In Press**

Executive Activity:

Iranian dentistry society of health ministry, technological improvements group.
2010

Presentations (University Seminars):

Neuroscience and nanotechnology

Imaging by nanoparticles

DNA nanotechnology

Targeting drug delivery

Cancer stem cells nanotechnology

Research Interests:

Cancer imaging by different types of nanoparticles

Tissue engineering

Neurotechnology

Drug and gene delivery to CNS

Cancer nanotechnology

Teaching Experience

Medical Physiology for BSC students 450h, Gonabad University of medical sciences, 2007-2008

Nano drug delivery, Pharmaceutics students 6h, Shahid Beheshti University of medical sciences, 2012

Neuroscience and nanotechnology, Neuroscience PhD students 2h, Neuroscience research center, Shahid Beheshti University of medical sciences, 2013

Technical Skills**Software and Web Based Knowledge including**

1. All standard of Microsoft office software
2. SPSS
3. Scientific and General Database Search
4. Operating systems: Microsoft windows
5. Endnote software

Laboratory Knowledge including

1. Cell Cultures
2. Tissue Culture
3. PCR
4. Flow Cytometry
5. Working experience with common laboratory animals

6. Scanning electron microscopy (sample preparation) and AFM
7. NMR, UV spectroscopy
8. FTIR
9. MTT and viability test
10. Fabrication of different types of nanoparticles: gold nanoparticles and nanorods, Dendrimer, etc.
11. Fluorescent and Confocal microscopy

Applied Bioinformatics and Computational Biology Software's

Biological database search

Pairwise and Multiple sequence alignment

Sequence based database search (BLAST and FASTA)

Protein structure prediction

RNA secondary structure prediction

Primer and probe designing and analysis tools e.g. primer3, primerblast and oligo 6

Other software's including NCBI utilities and some other sequence assembly and analysis software's applicable for gene manipulations