In the name of God

Personal & Contact information
Name: Bita
Surname: Mehravi, Ph.D., MBA
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Education:
Ph.D. in nanomedicine, Shahid Beheshti University of medical science Tehran, Iran, Sep. 2013
Ph.D. thesis title: Design and Synthesis of Glycosiated Gd^{3+} based Silica Mesoporous Nanospheres as contrast enhancer for MR images in Cancer Detection

Research Supervision:

- **Supervisor of M.Sc. and PhD thesis**

1- Design and synthesis of cysteine modified silica encapsulated Gd nanoparticles as contrast agent for imaging of breast cancer cells by MRI. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

2-Design and synthesis of glycosylated Nanoprobe for stem cell tracking. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

3- Design and synthesis of nanoparticles loaded with Diphenylcyclopropenone for target delivery to hair follicle. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

4-Designand synthesis of functionalized Low- Dnsity Lipoprotein Nanoparticless for detection of cancer in early stages by MRI. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

5- Design and synthesis of a biocompatible nanocarrier for ocular drug delivery. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

6- Evaluation of disinfectant power and determination of dose of ozone effect on viruses, especially covid 19 in instruments and clothing. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

7- Design and fabrication of rapid diagnostic kits based on gold nanosensor for detection of COVID-19 coronavirus. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

8- Design and synthesis of photocatalystic nanoparticles as anti fungi, anti viral and anti bacteria. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

9- Design and synthesis of bio compatible and bio degredeble nanogel-based carriers containing antifungi agent to increase effectiveness. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

10- Design and synthesis of biocompatible nanoparticle containing melphalan for control releases at in vitro study. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

11- Deign and synthesis of biodigridable nanoparticles encapsulated pirfenidone. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

12- Design and synthesis of biocompatible modified PCL nanoparticles containing quercetin for improvement of pulmonary fibrosis. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

13- Design and synthesis of nanocarriers containing postaconazole for the treatment of fungal diseases (mucormycosis treatment) . Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

14- The effect of photothermal therapy on glucose conjugated on gold nanoshell on cancer cells of retinoblastoma model y79. Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences, Tehran, Iran.

• Advisor of PhD. thesis in drug delivery into cancer cells, Tarbiat Modares University, Tehran, Iran.

Awards &Honor

Honors Distinction
Awarded for Dissertation entitled "Design and Synthesis of Glycosiated Gd^{3+} based Silica Mesoporous Nanospheres as contrast enhancer for MR images in Cancer Detection"

Outstanding Graduate Student of the Year
Awarded by Shahid Beheshti university od medical sciences 2013

Outstanding Teaching Award

Awarded by Iran University of medical sciences 2016

Awarded by Iran University of medical sciences 2020

Outstanding researcher Award

Awarded by Iran University of medical sciences 2016

Awarded by Iran University of medical sciences 2017

Outstanding accountability responsibility Award

Awarded by Iran University of medical sciences 2020

Awarded by Ministry of health medical sciences 2019

Prof. Vosogh Award in medical education
Awarded by Iran university of medical sciences for making the greatest contribution in **accountability responsibility education** during the preceding academic year

PROFESSIONAL AFFILIATIONS AND SERVICES _____

- **Faculty Member**
  Associated professor in medical nanotechnology, Department of Medical nanotechnology, faculty of advanced technology in Medicine, Iran University of Medical Sciences

- **Member of the medical nanotechnology board in Iran ministry of health**

- **Member of the stablishing board of the research center**

  Radiation Biology Research Center, Iran University of Medical Sciences,

  Finetech in Medicine Research Center, Iran University of Medical Sciences,

- **Committee Member**
  Social accountability Committee, Iran ministry of health
  Accountability responsibility Committee, Iran ministry of health

Publications:

Conjugation of glucosamine on Gd^{3+} based nanoporous silica using heterobifunctional crosslinker (ANB-NOS) for cancer cell imaging.
Authors: Mehravi B*****, Ahmadi M, Amanlou M, Mostaar A, Ardestani MS, Negar Ghalandarlaki.
International Journal of Nanomedicine. 2013:8, 3383–3394.

Cellular Uptake and Imaging Studies of Glycosylated Silica Nanoprobe (GSN) in Human Colon Adenocarcinoma (HT 29 Cell line).
Authors: Mehravi B*****, Ahmadi M, Amanlou M, Mostaar A, Ardestani MS, Negar Ghalandarlaki.
International Journal of Nanomedicine. 2013:8, 3209-3215.

Gd^{3+}-DTPA-DG: novel nanosized dual anticancer and molecular imaging agent.
Authors: Amanlou M, Siadat SD, Ebrahimi S ES, Mehravi B***** et al.
International Journal of Nanomedicine. 2011: 6, 747-763.

Novel Molecular Anti-colorectal cancer conjugate: chlorambucli-Adipic acid Dihdrazide-Glutamine
Authors: Maryam Akhavan Tabasi, Massoud Amanlou, Seyed Davar Siadat, Bita mehravi, et al.
Anti-cancer Agents in Medicinal Chemistry. 2013: 13,1-11.

Gd^{3+}-DTPA-Meglumine-Anionic Liniear Globular Dendrimer G1: Novel nanosized low toxic tumor molecular Mr Imaging agent
Authors: Tahmineh Darvishmohamadi, Massoud Amanlou, Negar Ghalandarlaki, Bita Mehravi et al.
ISRN Pharmaceutics. 2013: 13, 1-14

Nano-scaled Diethylene Triamine Pent Acetic Acid (N-DTPA): Novel Anti-Wilson's Disease Cell Model
Authors: Saba Zakeri, Ehsan Afzal1,Parichehr Yaghmaei, Mehdi Mirzaei, Bita Mehravi, Mohammad Reza Aghasadeghi, Massoud Amanlou
American Journal of Biomedical Science. 2012: 4(3), 204-219

Diethylentriaminepentaacetic Acid-deoxyglucoseamine (DTPA-DG): Novel Nanosized Anti-Wilson's Disease Cell Model
Authors:Mojgan Mashayekhi, Massoud Amanlou, Kourosh Sadeghi, Mona Mosayebniya, Mehdi Shafiee Ardestani, Bita Mehravi
American Journal of Biomedical Science. 2013: 5(1), 34-46

Gd^{3+} -DTPA-bis (N-methylamine) – Anionic Linear Globular Dendrimer-G1; A More Efficient MRI Contrast Media

Authors: N. Ghalandarlaki , T. D. Mohammadi , R. Agha Babaei , M. A. Tabasi , B. Mehravi , et al.
Drug Research. 2013; 63, 1–9

Breast cancer cells imaging by targeting methionine transporters with Gadolinium-based nanoprobe
Authors: Bita Mehravi, Mehdi Shafiei Ardestani, Maryam Damercheli, Haleh Soltanghoraee, Negar Ghanaldarlaki, Ali M. Alizadeh, Mohammad A. Oghabian , Maryam Shahzad Shirazi, Shabnam Mahernia and Massoud Amanlou
Molecular Imaging and Biology

Synthesis and development of MSN-Gd^{3+}-C595 as MR imaging contrast agent for prostate cancer cell imaging
Authors: Bita Mehravi*****, Mehdi Mirzaei, Seyed Amir Mohsen Ziaee, Mehdi S. Ardestani, Massoud Amanlou
Current Molecular Imaging, 2014, 3, 43-51

Cellular uptake, imaging and pathotoxicological studies of a novel Gd[III]–DO3A-butrol nano-formulation
Authors: Elham Mohammadi, Massoud Amanlou, Seyed Esmaeil Sadat Ebrahimi, Morteza Pirali Hamedani, Abdolkarim Mahrooz, Bita Mehravi*****
RSC Adv., 2014,4, 45984-45994

In Vitro evaluation of Gd^{3+}- anionic linear glubolar dendrimer-Monoclonal Antibody: Potential Magnetic Resonance Imaging Contrast Agents for prostate cancer cell imaging"
Authors: Mehdi Mirzaei, Bita Mehravi
Molecular Imaging & Biology.(2015)

Piperazine and its carboxylic acid derivatives-functionalized mesoporous silica as nanocarriers for gemcitabine: Adsorption and release study
Authors: Zohreh Bahrami, Alireza Badiei, Fatemeh Atyabi, Hossein Reza Darabi, Bita Mehravi
Materials Science and Engineering C 49 (2015) 66–74

Distribution Measurements in Pt-Sn-In/Al_2O_3 Catalysts With electro microprobe Authors:
Authors: Authors: Mehravi; B., Sahebdel far,S.; Hakamizadeh, M.,
Chemical and chemical engineering congress,1384.

New salen- type manganese(III) Schiff base complexes derived from meso-1,2-diphenyl-1,2-ethylenediamine: In vitro anticancer activity, Mechanism of action and Molecular docking studies

Authors: Maryam Damercheli,Davood Dayyani,Mahdi Behzad,Bita Mehravi &Mehdi Shafiee Ardestani

Journal of Coordination Chemistry 2015 in press

In Vitro evaluation of Gd^{3+}- anionic linear glubolar dendrimer-Monoclonal Antibody: Potential Magnetic Resonance Imaging Contrast Agents for prostate cancer cell imaging

Authors: Mehdi Mirzaei,1 Bita Mehravi,2 Mehdi Shafiee Ardestani,3 Seyed Amir Mohsen Ziaee,1 Peyman Pourghasem1

Molecular Imaging & Biology DOI: 10.1007/s11307-015-0841-9.(2015)

The effect of nanoparticles on pulmonary fibrosis: a systematic review and Meta-analysis o studies...
Authors: Rana Shahabi, Mohsen Dehghani, Seyed Ali Javad Moosavi,..., Bita Mehravi *****
Archives of Environmental & Occupational Health, 1-11

Destruction mechanisms of ozone over SARS-CoV-2
Authors: Angila Ataei-Pirkooh, Ali Alavi, Mehran Kianirad, ... Bita Mehravi*****
Scientific reports 11 (1), 1-10

Design and synthesis of potential nano-carrier for delivery of diphencyprone to hair follicle
Authors: Hooshyar, S. and Nafisi, S. and Mohseni, M. and Mehravi, B*****
Journal of Pharmaceutical Investigation 51 (2), 173-181

Natural polymeric nanoparticles as a non-invasive probe for mesenchymal stem cell labelli 2021)
Authors: Mojdeh Mohseni, Sima Shojaei, Bita Mehravi*****, Elham Mohammadi
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY 49 (1), 279-279

Folic acid decorated mesoporous silica nanospheres loaded with gadolinium for breast can
Authors: Safdar Zare Hosseinabadi, Sepideh Safari, Mehdi Mirzaei, Elham Mohammadi, Seye Amini and Bita Mehravi*****
Advances in Natural Sciences: Nanoscience and Nanotechnology 11 (4), 045010

In vitro and in vivo toxicity and histopathological evaluation of Gd (III) anionic Linear globu second-generation G2-C595 nanoprobe
Authors: Mehdi Mirzaei,Mohammad Esmaeil Akbari , Mohammad Ali Mohagheghi , Seyed M Tavangar , Bita Mehravi*****, Mehdi Shafiee Ardestani
Nanomedicine Journal 7 (4), 284-290

Natural polymeric nanoparticles as a non-invasive probe for mesenchymal stem cell labelli
Authors: M Mohseni, S Shojaei, B Mehravi*****, E Mohammadi
Artificial Cells, Nanomedicine, and Biotechnology 48 (1), 770-776

New nanoprobe for breast cancer cell imaging based on low-density lipoprotein
Authors: M Mirzaei, M Mohseni, N Iranpour Anaraki, E Mohammadi, S Safari, B Mehravi*
Artificial Cells, Nanomedicine, and Biotechnology 48 (1), 46-52

NIR triggered glycosylated gold nanoshell as a photothermal agent on melanoma cancer cells
Authors: S Nouri, E Mohammadi, B Mehravi*, F Majidi, K Ashtari, A Neshasteh-Riz, ...
Artificial cells, nanomedicine, and biotechnology 47 (1), 2316-2324

Investigating the effect of near infrared photo thermal therapy folic acid conjugated gold nano shell on melanoma cancer cell line A375
Authors: FS Majidi, E Mohammadi, B Mehravi*, S Nouri, K Ashtari, A Neshasteh-Riz
Artificial cells, nanomedicine, and biotechnology 47 (1), 2161-2170

Preparation of Bio-Inspired Melanin Nanoplatforms Chelated with Manganese Ions as a Potential T1 MRI Contrast **Agent**
Authors: M Maddah, H Delavari H, B Mehravi*
ChemistrySelect 4 (19), 5860-5865

Gold nanorods reinforced silk fibroin nanocomposite for peripheral nerve tissue engineering applications
Authors: E Afjeh-Dana, P Naserzadeh, H Nazari, F Mottaghitalab, R Shabani, ...
International journal of biological macromolecules 129, 1034-1039

Electrically conductive nanomaterials for cardiac tissue engineering
Authors: K Ashtari, H Nazari, H Ko, P Tebon, M Akhshik, M Akbari, SN Alhosseini, ...
Advanced Drug Delivery Reviews 144, 162-179

Comparison of the effects of MnO_2-NPs and MnO_2-MPs on mitochondrial complexes in different organs
Authors: A Ashrafi Hafez, P Naserzadeh, AM Mortazavian, B Mehravi, K Ashtari, ...
Toxicology mechanisms and methods 29 (2), 86-94

Bioactive Salen-type Schiff Base Transition Metal Complexes as Possible Anticancer Agents
Authors: M Damercheli, M Mahdi, B Mehravi, MS Ardestani
Iranian Journal of Pharmaceutical Research: IJPR 18 (4), 2055

Chitosan-alginate nano-carrier for transdermal delivery of pirfenidone in idiopathic pulmonary fibrosis
Authors: M Abnoos, M Mohseni, SAJ Mousavi, K Ashtari, R Ilka, B Mehravi*
International journal of biological macromolecules 118, 1319-1325

On-demand cellular uptake of cysteine conjugated gadolinium based mesoporous silica nanoparticle with breast cancer-cells
Authors: H Nazari, K Ashtari, M Soleimani, K Bagherzadeh, S Safari, B Mehravi*
Iranian Journal of Pharmacology and Therapeutics 16 (1), 1-8

Nanogel-based natural polymers as smart carriers for the controlled delivery of Timolol Maleate through cornea for glaucoma

Authors: R Ilka, M Mohseni, M Kianirad, M Naseripour, K Ashtari, B Mehravi*
International journal of biological macromolecules 109, 955-962

Structure-based pharmacophore design and virtual screening for novel potential inhibitors of epidermal growth factor receptor as an approach to breast cancer chemotherapy
Authors: S Mahernia, M Hassanzadeh, N Sharifi, B Mehravi, F Paytam, M Adib, ...
Molecular diversity 22 (1), 173-181

Application of inorganic nanoparticles in transdermal drug
Authors: S Hooshyar, S Nafisi, K Ashtari, B Mehravi*
Journal of Dermatology and Cosmetic 8 (4), 230-248

Polymer based nanofibers: preparation, fabrication, and applications
Authors: M Zahmatkeshan, M Adel, S Bahrami, F Esmaeili, SM Rezayat, Y Saeedi,B Mehravi ...
Handbook of nanofibers. Springer International Publishing, 1-47

Acute toxicity evaluation of glycosylated Gd3+-based silica nanoprobe
Authors: B Mehravi*, AM Alizadeh, S Khodayari, H Khodayari, K Ashtari, M Mohseni, ...
Molecular Imaging and Biology 19 (4), 522-530

Development of Nanoparticles for Drug Delivery to the Brain
Authors: E Afjeh Dana, M Marivani, B Mehravi*, F Karimzadeh, K Ashtari
The Neuroscience Journal of Shefaye Khatam 5 (2), 76-87

CONFERENCE PRESENTATIONS (*TALKS_ POSTERS*)

- *G*old nanoparticle enhanced computed tomography imaging technique (international neuroscience congress, 2014)
- MRI nanoprobes for neuroimaging (international neuroscience congress, 2014)
- Virtual lecturing in nanomedicine: delivery lectures using screen casting technology (national congress od medical education, 2015)
- The impact of nanoparticles on stem cell differentiation in tissue engineering (international tissue engineering and stem cell, 2016)
- Application of nanotechnology in tissue engineering (international tissue engineering and stem cell, 2016)
- Nanoparticle based stem cell tracking in tissue engineering (international tissue engineering and stem cell, 2016)
- Influence of nanotechnology in tissue engineering (International toxicity congress, 2017)
- Modified chitosan- alginate nanoparticles as a candidate for efficient ocular drug delivery (International semester polymer science and technology, 2020)

- Polymeric nanoparticle synthesis based on emulsion solvent evaporation as a smart drug delivery system for Quercetin delivery as a candidate of pulmonary fibrosis treatment (International semester polymer science and technology, 2020)

TEACHING EXPERIENCE

- Medical nanotechnology and nanomedicine (Advanced drug delivery, toxicity, instruments, synthesis and ...) (from 2013)
- Business and entrepreneurship in medicine (from 2013)
- Social Aaccountability (from 2018)

BOOKS

- Handbook of Nanofibers: Polymer Based Nanofibers: Preparation, Fabrication, and Applications, pp 1-47.2018
- How to register our invention, Iran university of medical sciences. 2014