

First Name: Bita

Last Name: Mehravi

Academic Degree: PhD, MBA

**Department:** Medical nanotechnology

University: Iran University of medical sciences

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# **Educational Background:**

Ph.D. in medical nanotechnology, Shahid Beheshti University of medical science Tehran, Iran, Sep. 2013

Ph.D. thesis title: Design and Synthesis of Glycosiated Gd<sup>3+</sup> based Silica Mesoporous Nanospheres as contrast enhancer for MR images in Cancer Detection

### **Certificates:**

- MBA from Tehran University of sciences, 2018
- Intellectual property from WIPO, 2018
- Certificate of Iran-Korea Nanotechnology Workshop, Tarbiat Modares University, Iran, 2015
- Certificate of Biosensor Workshop, 9th Student Congress on Nanotechnology, Tarbiat Modares University, Iran, 4 Mar. '12.

#### Awards, Grants, Scholarships:

- Top student in Beheshti University of Medical Sciences
- Selected in "Doctor Vosugh" Educational Festival (Top educational professor in 2015
- Top student and ranked first among fellow students in the same field of study (in all periods)
- Selected in "Doctor Motahari" Educational Festival of (2015)
- Ranked top professor in Medical School of Advanced Technologies
- Ranked first in board examination
- Ranked first in PhD
- Top Student of the Year 1390 at shahid beheshti university of medical sciences
- Earn top ranking among universities in the field of medical nanotechnology in PhD at shahid beheshti university of medical sciences
- Top Employee in UAST University
- Top researcher in IUMS in 2018

#### Scholarly Papers Published:

- Electrically conductive nanomaterials for cardiac tissue engineering, advanced drug delivery review, 2019
- Investigating the effect of near infrared photo thermal therapy folic acid conjugated gold nano shell on melanoma cancer cell line A375, 2019, Artificial cells, nanomedicine and biotechnology, https://doi.org/10.1080/21691401.2019.1593188
- NIR triggered glycosylated gold nanoshell as a photothermal agent on melanoma cancer cells,2019, Artificial cells, nanomedicine and biotechnology https://doi.org/10.1080/21691401.2019.1593187

- Chitosan-alginate nano-carrier for transdermal delivery of pirfenidone in idiopathic pulmonary fibrosis, 2018, International Journal of Biological Macromolecules, 8130(18)31161-9
- Gold nanorods reinforced silk fibroin nanocomposite for peripheral nerve tissue engineering applications, 2019, International Journal of Biological Macromolecules, https://doi.org/10.1016/j.ijbiomac.2019.02.050
- Preparation of Bio-Inspired Melanin Nanoplatforms Chelated with Manganese Ions as a Potential T1 MRI Contrast Agent. 2019, Materials Science inc. Nanomaterials & Polymers, 4, 5860–5865
- Acute Toxicity Evaluation of Glycosylated Gd<sup>3+</sup>-Based Silica Nanoprobe: Molecular Imaging and Biology (SPRINGER): August 2017, Volume 19, Issue 4, pp 522–530
- Nanogel-based natural polymers as smart carriers for the controlled delivery of Timolol Maleate through the cornea for glaucoma, Int J Biol Macromol. 2017 Nov 14. pii: S0141-8130(17)33504-3. doi: 10.1016/j.ijbiomac.2017.11.090
- Breast Cancer Cells Imaging By Targeting Methionine Transporters with Gadolinium-Based NanoprobeMolecular Imaging and Biology ,August 2014, Volume 16, Issue 4, pp 519–528
- Structure-based pharmacophore design and virtual screening for novel potential inhibitors of epidermal growth factor receptor as an approach to breast cancer chemotherapy, <u>Mol</u> <u>Divers.</u> 2017 Dec 2. doi: 10.1007/s11030-017-9799-7
- In Vitro Evaluation of Gd<sup>3+</sup>-Anionic Linear Globular Dendrimer-Monoclonal Antibody: Potential Magnetic Resonance Imaging Contrast Agents for Prostate Cancer Cell Imaging Molecular Imaging and Biology December 2015, Volume 17, Issue 6, pp 770–776|
- Cellular uptake and imaging studies of glycosylated silica nanoprobe (GSN) in human colon adenocarcinoma (HT 29 cell line), <u>Int J Nanomedicine</u>. 2013;8:3209-16. doi: 10.2147/JJN.S44815. Epub 2013 Aug 21.
- Conjugation of glucosamine with Gd3+-based nanoporous silica using a heterobifunctional ANB-NOS crosslinker for imaging of cancer cells, <u>Int J Nanomedicine</u>. 2013;8:3383-94. doi: 10.2147/JJN.S44829. Epub 2013 Sep 24.
- Cellular uptake, imaging and pathotoxicological studies of a novel Gd[iii]—DO3A-butrol nanoformulation, RSC Adv., 2014,4, 45984-45994

- Synthesis and Development of MSN-Gd<sup>3+</sup>-C595 as MR Imaging Contrast Agent for Prostate Cancer Cell Imaging, <u>Current Molecular Imaging</u>, Volume 3, Number 1, March 2014, pp. 43-51(9)
- New salen-type manganese(III) Schiff base complexes derived frommeso-1,2-diphenyl-1,2-ethylenediamine:In vitroanticancer activity, mechanism of action, and molecular docking studies, Journal of Coordination Chemistry, 06 April 2015 Volume 68, 2015 Issue 9,
- In vitro Evaluation of Gadolinium-Silica Mesoporous Nanoparticles- Monoclonal Antibody: Potential Nanoprobe for Prostate Cancer Cell Imaging, <u>Current Molecular Imaging</u>, Volume 4, Issue 1, 2015
  - Crystal structures and in vitro anticancer studies on new unsymmetrical copper(II) Schiff base complexes derived from meso-1,2-diphenyl-1,2-ethylenediamine: a comparison with related symmetrical ones, Journal of Coordination Chemistry,2016, Pages 2469-2481
- Piperazine and its carboxylic acid derivatives-functionalized mesoporous silica as nanocarriers for gemcitabine: Adsorption and release study, Materials Science and Engineering C 49 (2015) 66–74
- Bioactive salen-type Schiff base transition metal complexes as possible anticancer agents, Iranian Journal of Pharmaceutical Research (IJPR),2017,in press
- On-demand Cellular Uptake of Cysteine Conjugated Gadolinium based Mesoporous Silica Nanoparticle with breast cancer-cells, 2018, Iranian J Pharmacol Ther. 2018 (March);16:1-8.

## **Teaching Experience:**

Principles of nanomedicine
Principles targeting drug delivery
nanomaterial and nanostructures
synthesis of nanomaterial and nanostructures

Characterization methods of nanomaterial and nanostructures

Business and entrepreneur in medical nanotechnology MBA

#### Intellectual properties

## **Workshop Teaching Experience:**

Manager of Proteomics Workshop, Tarbiat Modares University, Iran, 3-4 June. '13. 2

Patent (Tehran University of Medical Sciences)

Patent (Iran University of Medical Sciences)

International Congress on the Introduction to the WIPO and PCT

CTD Preparation and writing workshops

Water Validation in pharmaceutical products workshop

Workshop on Pharmaceutical documentation

Workshop on Pharmaceutical GMP

Build and Test of Catalyst (in Lyon, France)

Design of Experiments with Taguchi Method

Gaussian Software

Fire Stations and safety

**Design Laboratory Reactors** 

Determine the kinetics of chemical reactions

Work with the electron microscope (in France and in Iran)

GC education

Workshop on Research Methodology

Workshop on teaching methods

Strategic management workshop

Workshop on Portal education

Research Management workshop

Workshop on article writing

END NOTE Workshop

EDU workshop

Knowledge translation workshops

Workshop on from Thesis to industry

Workshop on creative marketing ideas

International congress on neorontology and neuroprotection

Congress on Medical Ethics

Workshop on phraseology

### **Scholarly Journal Reviewer:**

Journal of nanomedicine

## **Book Chapter Published:**

• Structural Multifunctional Nanofibers and Their Emerging Applications, Handbook of Nanofibers pp 1-47

# **Books Published:**

Intellectual property in medical sciences 2018

# **Other Work Experience:**

Head of medical nanotechnology department, Faculty of Advanced Medical Technologies, IUMS

Deputy of Education, Faculty of Advanced Medical Technologies, IUMS

Director of Brilliant Talent Office IUMS

