

Niloufar Rahiman

Pharm.D., Ph.D.

Department of Pharmaceutical Nanotechnology, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran

Date of Birth: 1992

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EDUCATION

2016-2023

Ph.D. Degree: Graduated from Mashhad University of Medical Sciences, School of pharmacy; Mashhad, Iran (www.mums.ac.ir)

Supervisor: Prof. Mahmoud reza Jaafari, PharmD, PhD.

Dissertation title: "Novel liposomal Glatiramer acetate: Preparation and immunomodulatory evaluation in murine model of Multiple sclerosis"

2011-2016

Pharm.D. Degree: Graduated from Mashhad University of Medical Sciences, School of pharmacy; Mashhad, Iran (www.mums.ac.ir)

Dissertation title "The role of the MAPK signaling pathway in the antioxidant effect of crocin, safranal, extract and essential oil of saffron on the bovine aortic endothelial cells (BAE) as an in vitro model of cardiovascular diseases"

Supervisor: Prof. Zahra Tayarani Najaran, PharmD, PhD.

EXPERTISE AND RESEARCH INTERESTS

- Design and preparation of drug delivery systems and liposomal form of drugs
- Autoimmune diseases and models/ Cancer therapy
- Nanotechnology (Expert in liposome preparation, ELISA, SDS-PAGE)
- Toxicology (Expert in toxicological assays such as Alamar Blue®, MTT, apoptosis assays, Western Blot)
- Expert in working with ELISA Reader, Spectrophotometry, Fluorimetry, Flow Cytometry, Gas chromatography (GC-FID), Scanning Electron Microscopy (SEM), etc.

WORK/PROFESSIONAL EXPERIENCE

March 2024-March 2025

Laboratory expert at analysis lab (GC-FID analysis) at food, drug and cosmetics control laboratory of Food and Drug Administration (FDA) of Khorasan province branch, Razavi Khorasan, Mashhad, Iran (Considered as the mandatory medical duty)

Duties:

- Analysis of lipid profiles of oil and oil products in markets by GC-FID instrument
- Controlling of packaging of products (Plastics (polymers used in food packaging)/ Metal cans for food packaging/Paper and cardboard tests/ Glass tests for food packaging)

Sep 2016-Dec 2023

Assistant (Ph.D. candidate) of pharmaceutical nanotechnology in Mashhad University of Medical Sciences, Mashhad, Iran.

Dec 2016-2025

Teaching Assistant for over 150 undergraduate pharmacy students

Dec 2016-Present

Pharmacist in Iran DPIC (Drug and Poison Information Center), providing information on poison and drugs to community and health care professionals, designing scientific pamphlets for health care professionals and public and recording Adverse Drug Reactions (ADR) reported by health professionals within yellow cards and statistical data analysis. (Mashhad University of Medical Sciences, Mashhad, Iran)

Jun 2019-Present

Part time Community Responsible Pharmacist in University Central Pharmacies (Hazrat Rasoul, 22 Bahman)

Sep 2018-2024

Part Time Pharmacist, Akbar Pediatric Hospital Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran.

Sep 2016-Present

Project/Scientific assistant

- Training and mentoring undergraduate pharmacy students in their pharmacy dissertation
- Manuscript writing and editing for publication in scientific journals
- Gathering and analyzing experimental data

Sep 2016-Apr 2017

Part Time Pharmacist, Dr. Sheykh Pediatric Hospital Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran.

2014-2015

Pharmaceutical Internship, Samen Serum Pharmaceutical Co., Sadjad darou Pharmaceutical Co. and Samisaz Pharmaceutical Co., Mashhad, Iran.

2014-2015

Hospital Pharmacy Internship, Dr Sheykh, 22 Bahman, Hazrat Rasoul and Emam Reza hospitals, Mashhad, Iran.

PUBLICATIONS

No	Title	Journal name	Publication Year	IF
1	Novel liposomal Glatiramer acetate: Preparation and immunomodulatory evaluation in murine model of Multiple sclerosis	International Journal of Pharmaceutics	2023	5.3
2	Recent advancements in nanoparticle- mediated approaches for restoration of multiple sclerosis	Journal of Controlled Release	2022	10.5
3	An insight into the role of liposomal therapeutics in the reversion of multiple sclerosis	Expert Opinion on Drug Delivery	2022	5
4	Curcumin-Based Nanofibers: A Promising Approach for Cancer Therapy	Pathology-Research and Practice	2024	2.9
5	Poly-γ-glutamic acid nanoparticles as adjuvant and antigen carrier system for cancer vaccination	Journal of Controlled Release	2023	10.5
6	Curcumin-based nanotechnology approaches and therapeutics in restoration of autoimmune diseases	Journal of Controlled Release	2022	10.5
7	Oligonucleotide based nanogels for cancer therapeutics	International Journal of Biological Macromolecules	2024	7.7
8	Protective effects of saffron and its active components against oxidative stress and apoptosis in endothelial cells	Microvascular Research	2018	2.9
9	Evaluation of the Efficacy of Diphenylcyclopropenone in Alopecia Areata: Review Study	Journal of Pharmacy and Pharmacology	2016	2.8
10	Lipid nanoparticle (LNP) mediated mRNA delivery in neurodegenerative diseases	Journal of Controlled Release	2025	10.5
11	B12-functionalized PEGylated liposomes for the oral delivery of insulin: In vitro and in vivo studies	Journal of Drug Delivery Science and Technology	2022	4.5
12	Novel EPR-enhanced strategies for targeted drug delivery in pancreatic cancer: An update	Journal of Drug Delivery Science and Technology	2022	4.5
13	Targeting fibroblast activation protein (FAP): advances in CAR-T cell, antibody, and vaccine in cancer immunotherapy	Drug Delivery and Translational Research	2023	5.7
14	Therapeutic targeting of TGF-β in lung cancer	The FEBS Journal	2025	5.5
15	Lignin and Pluronic-based nanomicelles as promising amiodarone nanocarriers: Synthesis, physical characterization, biological, and in silico evaluations	Industrial Crops and Products	2024	5.6
16	Development and Characterization of Polymer-Stabilized Dobutamine	Nano LIFE	2025	0.8

	Nanomicelles for Improved Drug Delivery			
17	Design and physico-mechanical evaluation of fast-dissolving valsartan polymeric drug delivery system by electrospinning method	Iranian Journal of Basic Medical Sciences	2021	2.1
18	Preparation of stable enteric folic acid- loaded microfiber using the electrospinning method	Iranian Journal of Basic Medical Sciences	2022	2.1

BOOKS / CHAPTERS

- 1. **Rahiman N**, Alavizadeh SH, Simental-Mendía LE, Sahebkar A. Micelle-based curcumin delivery systems as cancer therapeutics (Chapter 9 in "Curcumin-Based Nanomedicines as Cancer Therapeutics", 1st Edition January 1, 2024); 165-208.
- 2. **Rahiman N**, Mohammadi M, Alibolandi A. Theranostics Magnetic Nanoparticles Mediated Drug Delivery (Chapter 16 in "Theranostics Nanomaterials in Drug Delivery", 1st Edition Nov 1,2024).

WORKSHOPS / TRAINING COURSES

2020 Certificate of a 4-hour attendance in "Essay writing technique" workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2019 Certificate of a 2-hour attendance in" Tricks of reference multiplication: Doping or product introduction" workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2019 Certificate of a 4-hour attendance in Step by step wealth creation from ideas in the third millennium business space workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2019 Certificate of a 4-hour attendance in" The miracle of implementing ideas (Innovation in business model design)" workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2019 Certificate of a 4-hour attendance in" Discovering golden ideas for business startups" workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2019 Certificate of a 4-hour attendance in" Customer Interview Principles" workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2018 Certificate of a 40-hour attendance in "Systematic review & meta-analysis" workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2018 Certificate of a 2-hour attendance in "Paper Presentation" workshop held Mashhad University of Medical Sciences, Mashhad, Iran.

2018 Certificate of a 30-hour attendance in the 1st School of Pharmaceutics with the topics of "Quality management in pharmaceutical industry, Principles of drug production and work in clean areas, Understanding the role R&D in the Iran's pharmaceutical industry, GMP's general principles, Upstream & Downstream GMP principles, Validation& Qualification, Cleaning Validation, Process Validation, AMV, CSV, QRM" held by Mashhad University of Medical Sciences, Mashhad, Iran.

2017 Certificate of attendance in "Cosmetic and Hygienic products" workshop held by 20th Iranian Pharmacy Students' Seminar (IPSS20), Tehran University of Medical Sciences, Tehran, Iran.

2017 Certificate of a 4-hour attendance in "End note" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2017 Certificate of a 9-hour attendance in "Photoshop" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2015 Certificate of a 2-hour attendance in "Introduction of Microfluidic principles and its application in medical sciences" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2015 Certificate of a 4-day attendance in "GMP" and "GMP advanced course" workshop held by Pharmaceutical Manufacturers Association of Khorasan Razavi, Mashhad, Iran.

2015 Certificate of attendance in "Specialized workshop of mechanism of drug interactions according to clinical data" workshop held by International Congress of Quality, Safety and Rational Use of Drug, Mashhad, Iran.

2013 Certificate of a 10-hour attendance in "Photoshop" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2013 Certificate of a 4-hour attendance in "Drug information of medicinal plants" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2013 Certificate of a 4-hour attendance in "Essay writing" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2013 Certificate of a 4-hour attendance in "proposal writing" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2013 Certificate of a 4-hour attendance in "Curriculum Vitae writing" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2012 Certificate of a 4-hour attendance in "Medication for pregnant mothers" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2012 Certificate of a 4-hour attendance in "Extraction of plants" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2012 Certificate of a 4-hour attendance in "Pediatric medication" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

2012 Certificate of a 4-hour attendance in "OTC therapy" workshop held by Mashhad University of Medical Sciences, Mashhad, Iran.

PROFESSIONAL SKILLS

Softwares

Office

Scientific/General Software: STATA, GraphPad PRISM, SPSS, Sigma Plot, MEGA, EndNote, Prezi, Mendeley, WinMDI, Design-Expert, FlowJo, ChemDraw, Adobe Photoshop, CorelDRAW.

• Ability to search using scientific search engines such as PubMed, Scopus and Sciencedirect, Cochrane, Up-to-Date, etc.

Laboratory Skills

- Cell Culture
- Validation of analytical methods
- MTT and AlamarBlue® viability assay
- ELISA
- SDS-PAGE
- GC-FID (Gas Chromatography-Flame Ionization Detector)
- Nanoparticle preparation

- Cell lysis
- Western blot
- Flow cytometry
- Microscopy
- Centrifugation
- Animal handling: Mice /Rat
- Physicochemical lab: Titrations, Fluorimeter, UV/Visible Spectrophotometer
- Adherence to safety regulations and guidelines
- Ability to follow lab protocols

LANGUAGE SKILLS

English

REFERENCES

Reference 1#

Prof. Mahmoud Reza Jafari

Head of Pharmaceutics and Pharmaceutical Nanotechnology Department, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran.

Email: Jafarimr@mums.ac.ir

Reference 2#

Prof. Zahra Tayarani Najjaran

Department of Pharmacodynamics and Toxicology, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran.

Email: <u>TayaraniNZ@mums.ac.ir</u>