Dr. Vajihe Akbari

Current position:

Associate Professor, Department of Pharmaceutical Biotechnology, Faculty of Pharmacy and Pharmaceutical Sciences, Isfahan University of Medical Sciences, Isfahan, Iran

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Educational Background:

Pharm .D

Faculty of pharmacy, Kerman, Iran, 2002-2008

Titles of Pharm.D 's thesis:

Preparation, characterization and cytotoxicity evaluation of ciprofloxacin loaded niosomes

PhD

Faculty of pharmacy, Isfahan, Iran, 2009-2014

Title of PhD 's thesis

Construction, expression and biological activity evaluation of a single-chain Fv antibody fragment specific for domain II of HER2 receptor in *Escherichia coli*

Teaching experience:

2015- Present "Pharmaceutical Biotechnology" for Pharm.D students (Isfahan University of Medical Science)

2015-Present "Biological Products" for Pharm.D students (Isfahan University of Medical Science)

2016-Present "Microbiological Quality Control of Pharmaceutical Products" for Pharm.D students (Isfahan University of Medical Science)

2016-Present "Microbiological Quality Control of Pharmaceutical Products (practical)" for Pharm.D students (Isfahan University of Medical Science)

2015- Present " Biology" for Masters students of Toxicology (Isfahan University of Medical Science).

2015- Present " Biology" for Masters students of Medicinal Chemistery (Isfahan University of Medical Science).

2015- Prresent "Bioproccess 1 & 2" for Ph.D students of Pharmaceutical Biotechnology (Isfahan University of Medical Science).

2015- Present "Cellular and Molecular Biology" for Ph.D students of Pharmaceutical Biotechnology (Isfahan University of Medical Science).

2015- Present "Genetic Engineering" for Ph.D students of Pharmaceutical Biotechnology (Isfahan University of Medical Science).

2015 "Nanbiotechnology and biomaterial" for Ph.D students of Pharmaceutical Nanotechnology (Isfahan University of Medical Science).

Other experience:

Head of Pharmaceutical Biotechnology Department. Faculty of Pharmacy and Pharmaceutical Sciences, Isfaha. (2022-present).

Director of Educational Development Office. Faculty of Pharmacy and Pharmaceutical Sciences, Isfaha. (2019-present).

Scientific referee in 15th Iranian Seminar of Pharmacy Students (ISPS) (2010).

Editorial assistants of Journal of Research in Pharmaceutical Sciences. A publication of school of pharmacy and pharmaceutical sciences, Isfahan university of medical sciences, Isfahan, Iran.

Editorial board of Drug Information Journal. A monthly publication of student research committee of school of pharmacy and pharmaceutical sciences, Kerman, Iran.

Publications:

a) Books

'The vaccines and their application in prevent and treatment of disease', in Persian.

‘Biological product Vaccines’ , in Persian

‘Blood biologiacal products’ , in persian

b.) Articles published in ISI Journals:

1. Comparison of epothilone and taxol binding in yeast tubulin using molecular modeling. Vajihe Akbari, Sharareh Moghim and Mohammad Reza Mofid, Avicenna Journal of Medical Biotechnology. 2011;3(4):167-76.
2. Optimization of the Expression of Genes Encoding Poly (3-hydroxyalkanoate) Synthase from *Pseudomonas aeruginosa* PTCC 1310 in *Escherichia coli.* Daryoush Abedi, Maryam Beheshti, Ali Jahanian Najafabadi, Hamid Mir Mohammad Sadeghi, and Vajihe Akbari, Avicenna Journal of Medical Biotechnology. 2012;4(1):47-51.
3. Comparison of five methods for extraction of genomic DNA from a marine Archaea, *Pyrococcus furiosus*. Hamid Mirmohammadsadeghi, Daryoush Abedi, Hamid Reza Mohmoudpour and Vajihe Akbari, Pakistan Journal of Medical Sciences. 2013;29(1)Suppl:390-394.
4. Ciprofloxacin nano-niosomes for targeting intracellular infections: an *in vitro* evaluation. Vajihe Akbari, Daryoush Abedi, Abbas Pardakhty and Hojjat Sadeghi-Aliabadi, Journal of Nanoparticle Research. 2013; 15(4):1-14.
5. *In vitro* anti-bacterial and anti-adherence effects of *Lactobacillus delbrueckii* subsp *bulgaricus* on *Escherichia coli*. Daryoush Abedi, Sahar Feizizadeh, Vajihe Akbari and Abbas Jafarian-Dehkordi. Research in Pharmaceutical Sciences. 2013;8(4):261-8.

6. Akbari Vajihe, Mir Mohammad Sadeghi Hamid, Jafrian-Dehkordi Abbas, Abedi Daryoush, Chou C Perry. Functional expression of a single-chain antibody fragment against human epidermal growth factor receptor 2 (HER2) in Escherichia coli. J Ind Microbiol Biotechnol. 2014;41(6):947-56.
7. Feizizadeh Sahar, Salehi-Abargouei Amin, Akbari Vajihe. Efficacy and Safety of Saccharomyces boulardii for Acute Diarrhea. Pediatrics. 2014:peds. 2013-3950.
8. Akbari Vajihe, Mir Mohammad Sadeghi Hamid, Jafarian-Dehkordi Abbas, Chou C Perry, Abedi Daryoush. Optimization of a single-chain antibody fragment overexpression in Escherichia coli using response surface methodology. Research in Pharmaceutical Sciences. 2014;10(1):65-73.
9. Akbari Vajihe, Daryoush Abedi, Abbas Pardakhty and Hojjat Sadeghi-Aliabadi. Release Studies on Ciprofloxacin Loaded Non-ionic Surfactant Vesicles. Avicenna Journal of Medical Biotechnology. 2015;7(2):69-75.
10. Akbari Vajihe, Mir Mohammad Sadeghi Hamid, Jafrian-Dehkordi Abbas, Abedi Daryoush, Chou C Perry. Improved biological activity of a single chain antibody fragment against human epidermal growth factor receptor 2 (HER2) expressed in the periplasm of Escherichia coli. Protein Expression and Purification. 2015;116:66-74.
11. Akbari Vajihe, Hendijani Fatemeh, Feizi Avat, Varshosaz Jaleh, Fakhari Zeynab, Morshedi Somayeh, *et a*l. Efficacy and safety of oral insulin compared to subcutaneous insulin: a systematic review and meta-analysis. Journal of endocrinological investigation. 2016 Feb;39(2):215-25.
12. Abedi D, Moazen F, Akbari V, Mirzaalian F, Sadeghi HMM. Optimization of the expression of phaC2 encoding poly (3-hydroxyalkanoate) synthase from Pseudomonas aeruginosa PTCC1310 in Fad B deleted Escherichia coli. Advanced Biomedical Research. 2016;5(1):50.
13. Ghavimi R, Akbari V. Clinical applications of cell encapsulation technology in cell and drug delivery. Journal of Isfahan Medical School. 2016;34(375):259-69.
14. Akbari V, Hendijani F. Effects of probiotic supplementation in patients with type 2 diabetes: systematic review and meta-analysis. Nutrition Reviews. 2016;74(12):774-84.
15. Nurani M, Akbari V, Taheri A. Preparation and characterization of metformin surface modified cellulose nanofiber gel and evaluation of its anti-metastatic potentials. Carbohydrate Polymers. 2017;165:322-33.
16. Akbari V, Zafari S, Yegdaneh A. Anti-tuberculosis and cytotoxic evaluation of the seaweed Sargassum boveanum.Research in Pharmaceutical Sciences. 2018; 13(1); 30-37.
17. Hendijani F, Akbari V. Probiotic supplementation for management of cardiovascular risk factors in adults with type II diabetes: A systematic review and meta-analysis. Clinical Nutrition. 2018; 37(2): 532-541.
18. Alizadeh N, Akbari V, Nurani M, Taheri A. Preparation of an injectable doxorubicin surface modified cellulose nanofiber gel and evaluation of its anti-tumor and anti-metastasis activity in melanoma. Biotechnology Progress.2018; 34(2): 537-545.
19. Rezazadeh M, Akbari V, Amuaghae E, Emami J. Preparation and characterization of an injectable thermosensitive hydrogel for simultaneous delivery of paclitaxel and doxorubicin. Research in Pharmaceutical Sciences. 2018; 13(3):181-191.
20. Abasaleh Avand, Vajihe Akbari , Shahin Shafzadegan. In vitro cytotoxic activity of a lactococcus lactis antimicrobial peptide against breast cancer cells. Iranian Journal of Biotechnology. 2018; 16 (3): 213-220.
21. Esmaili Iman, Mohammad Sadeghi Hamid Mir, Akbari Vajihe. Effect of buffer additives on solubilization and refolding of reteplase inclusion bodies. Research in Pharmaceutical Sciences. 2018;13(5):413-21.
22. Rezazadeh M, Jafari N, Akbari V, Amirian M, Tabbakhian M, Minaiyan M, Rostami M. A mucoadhesive thermosensitive hydrogel containing erythropoietin as a potential treatment in oral mucositis: in vitro and in vivo studies. Drug Delivery and Translational Research. 2018;8(5):1226-37.
23. Salehinia J, Mir mohammad Sadeghi H, Akbari V. Improvement of solubility and refolding of an anti-human epidermal growth factor receptor 2 single-chain antibody fragment inclusion bodies. Research in Pharmaceutical Sciences. 2018;13(6):566-74.
24. AkbariV, Rezazadeh M, MinayianM, Amirian M, Moghadas M, Talebi A. Effect of freeze drying on stability, thermo-responsive characteristics, and in vivo wound healing of erythropoietin-loaded trimethyl chitosan/glycerophosphate hydrogel. 2018;13(6):476-83.

25. Malekian R, Jahanian-Najafabadi A, Moazen F, Ghavimi R, Mohammadi E, Akbari V. High-yield Production of Granulocyte-macrophage Colony-stimulating Factor in E. coli BL21 (DE3) By an Auto-induction Strategy.I ranian Journal of Pharmaceutical Research. 2019.18(1).
26. Rezazadeh M, Parandeh M, Akbari V, Ebrahimi Z, Taheri A. Incorporation of rosuvastatin-loaded chitosan/chondroitin sulfate nanoparticles into a thermosensitive hydrogel for bone tissue engineering: preparation, characterization, and cellular behavior. Pharmaceutical Development and Technology. 2019;24(3):357-67.
27. Malekian R, Sima S, Jahanian-Najafabadi A, Moazen F, Akbari V. Improvement of soluble expression of GM-CSF in the cytoplasm of Escherichia coli using chemical and molecular chaperones. Protein Expr Purif. 2019;160:66-72.
28. Tavakoli N, Taymouri S, Saeidi A, Akbari V. Thermosensitive hydrogel containing sertaconazole loaded nanostructured lipid carriers for potential treatment of fungal keratitis. Pharmaceutical Development and Technology. 2019;24(7):891-901.
29. Zare H, Sadeghi HMM, Akbari V. Optimization of Fermentation Conditions for Reteplase Expression by Escherichia coli Using Response Surface Methodology. Avicenna Journal of Medical Biotechnology. 2019;11(2):162-168.
30. Taymouri S, Alem M, Varshosaz J, Rostami M, Akbari V, Firoozpour L. Biotin decorated sunitinib loaded nanostructured lipid carriers for tumor targeted chemotherapy of lung cancer. Journal of Drug Delivery Science and Technology. 2019;50:237-47.
31. Dehkordi NK, Minaiyan M, Talebi A, Akbari V, Taheri A. Nanocrystalline cellulose–hyaluronic acid composite enriched with GM-CSF loaded chitosan nanoparticles for enhanced wound healing. Biomedical Materials. 2019;14(3):035003.
32. Taherian E, Mohammadi E, Jahanian-Najafabadi A, Moazen F, Akbari V. Cloning, Optimization of Periplasmic Expression and Purification of Recombinant Granulocyte Macrophage-Stimulating Factor in Escherichia coli BL21 (DE3). Advanced biomedical research. 2019;8:71.
33. Fazeli B, Akbari V, Barkhordari A, Mir Mohammad Sadeghi H. Improvement of Soluble Production of Reteplase in Escherichia coli by Optimization of Chemical Chaperones in Lysis Buffer. Advanced biomedical research. 2019;8:65-.
34. Molaahmadi MR, Varshosaz J, Taymouri S, Akbari V. Lipid Nanocapsules for Imatinib Delivery: Design, Optimization and Evaluation of Anticancer Activity Against Melanoma Cell Line. Iranian journal of pharmaceutical research : IJPR. 2019 Fall;18(4):1676-93. PubMed PMID: 32184838.
35. Sadeghi Dinani M, Malakooti S, Akbari V. In vitro cytotoxic activity of Verbascum alceoides against cervix carcinoma cells. Journal of Reports in Pharmaceutical Sciences. 2020;9(1):19-24.
36. Akbari V, Rezazadeh M, Ebrahimi Z. Comparison the effects of chitosan and hyaluronic acid-based thermally sensitive hydrogels containing rosuvastatin on human osteoblast-like MG-63 cells. Research in pharmaceutical sciences. 2020;15(1):97-106.
37. Nasehi N, Varshosaz J, Taymouri S, Rostami M, Akbari V, Firoozpour L. Sorafenib loaded pluronic F127-lithocholic acid micelles for prostate cancer therapy: Formulation, optimization, and in vitro evaluation against LNCaP cells. International Journal of Polymeric Materials and Polymeric Biomaterials. 2020;69(3):158-72.
38. Ghavimi R, Mohammadi E, Akbari V, Shafiee F, Jahanian-Najafabadi A. In silico design of two novel fusion proteins, p28-IL-24 and p28-M4, targeted to breast cancer cells. Research in pharmaceutical sciences. 2020;15(2):200-8.
39. Soheili S, Jahanian-Najafabadi A, Akbari V. Evaluation of soluble expression of recombinant granulocyte macrophage stimulating factor (rGM-CSF) by three different E. coli strains. Research in Pharmaceutical Sciences. 2020;15(3):218-25.
40. Mohammadian H, Mahnam K, Sadeghi HM, Ganjalikhany MR, Akbari V. Rational design of a new mutant of tobacco etch virus protease in order to increase the in vitro solubility. Research in Pharmaceutical Sciences. 2020;15(2):164-73.
41. Ahmadian M, Jahanian A, Akbari V. Optimization of buffer additives for efficient recovery of hGM-CSF from inclusion bodies using response surface methodology. Iranian Journal of Pharmaceutical Research. 2020. In press.
42. 59. New insights into affinity proteins for HER2-targeted therapy: Beyond trastuzumab
V Akbari, CP Chou, D Abedi. Biochimica et Biophysica Acta (BBA)-Reviews on Cancer. 2020: 1874 (2), 188448

43. Bioassay-guided fractionation and antimicrobial activities of Padina australis extracts
V Akbari, F Safaiee, A Yegdaneh. Jundishapur Journal of Natural Pharmaceutical Products. 2020: 15 (4(
44. Bioassay-guided isolation of glycolipids from the seaweed Gracilaria corticata
V Akbari, M Abedi, A Yegdaneh. Research in pharmaceutical sciences.2020: 15 (5), 473
45 Production and Evaluation of In-vitro and In-vivo Effects of P28-IL24, a Promising Anti-breast Cancer Fusion Protein. R Ghavimi, V Akbari, A Jahanian-Najafabadi. International Journal of Peptide Research and Therapeutics.2021: 27 (4), 2583-2594.

46. Preparation and characterization of poly (lactic-co-glycolic acid) nanofibers containing simvastatin coated with hyaluronic acid for using in periodontal tissue engineering
Z Malekpour, V Akbari, J Varshosaz, A Taheri. Biotechnology Progress. 2021: 37 (6), e3195.

47. DFF40-iRGD, a novel chimeric protein with efficient cytotoxic and apoptotic effects against triple-negative breast cancer cells. R Amrollahi-Nia, V Akbari, F Shafiee. Biotechnology Letters.2021: 43 (10), 1967-1976

48. Development of N-halamine Low-Melting Point Poly(ethylene terephthalate) Fibers via Melt Spinning: Structural Characterization and Demonstration of…
R Ahmadi, H Fashandi, V Akbari. Polymer-Plastics Technology and Materials.2021: 60 (11), 1185-1202

49. Survivin promoter-driven DFF40 Gene expression sensitizes melanoma cancer cells to chemotherapy. G Minaiyan, F Shafiee, V Akbari. International Journal of Toxicology.2021: 40 (4), 380-387

50. Inhibition of aldehyde dehydrogenase by furazolidone nanoemulsion to decrease cisplatin resistance in lung cancer cells. M Darooee, V Akbari, A Taheri. Therapeutic Delivery.2021: 12 (8), 611-625

51. Sustained-release of erythropoietin using a novel injectable thermosensitive hydrogel: in vitro studies, biological activity, and efficacy in rats
M Rezazadeh, V Akbari, J Varshosaz, P Karbasizadeh, M Minaiyan
Pharmaceutical Development and Technology.2021: 26 (4), 412-421

52. Risk of neurodegenerative disease due to tau phosphorylation changes and arsenic exposure via drinking water. D Pakzad, V Akbari, MR Sepand, M Aliomrani
Toxicology Research . 2021: 10 (2), 325-333

53. Preparation and in vitro characterization of histidine trimethyl chitosan conjugated nanocomplex incorporated into injectable thermosensitive hydrogels for localized gene delivery
V Akbari, M Rezazadeh, NS Hanaie, F Hasanzadeh
Biotechnology and Applied Biochemistry.2022: 69 (3), 1047-1057
54. An injectable thermosensitive hydrogel/nanomicelles composite for local chemo-immunotherapy in mouse model of melanoma. V Akbari, E Hejazi, M Minaiyan, J Emami, A Lavasanifar, M Rezazadeh. Journal of Biomaterials Applications, 2022. 08853282221098232
55. Bioprocess optimization of interferon β-1-a in Pichia pastoris and its improved inhibitory effect against hepatocellular carcinoma cells. N Moatamedi, R Emamzadeh, HMM Sadeghi, V Akbari
Brazilian Journal of Pharmaceutical Sciences .2022.58

56. Cancer vaccines as a targeted immunotherapy approach for breast cancer: An update of clinical evidence. M Abbaspour, V Akbari. Expert Review of Vaccines.2022. 21 (3), 337-353.

57. Comparison of four methods of colon cancer cell lysates preparation for ex vivo maturation of dendritic cells. M Roufarshbaf, N Esmaeil, V Akbari
Research in Pharmaceutical Sciences.2022: 17 (1), 43
58. Nisin induces apoptosis in cervical cancer cells via reactive oxygen species generation and mitochondrial membrane potential changes. H Sadri, M Aghaei, V Akbari. Biochemistry and Cell Biology.2022: 100 (2), 136-141.

59. Preparation, physicochemical, and retinal anti-angiogenic evaluation of poloxamer hydrogel containing dexamethasone/avastin-loaded chitosan-N-acetyl-L-cysteine nanoparticles
SL Taheri, M Rezazadeh, F Hassanzadeh, V Akbari, A Dehghani... ,
International Journal of Biological Macromolecules.2022: 220, 1605-1618

60. Efficacy and safety of ibrutinib in mantle cell lymphoma: A systematic review and meta-analysis
M Roufarshbaf, M Javeri, V Akbari, PH Matin, P Farrokhi, E Sadeghi... ,
DARU Journal of Pharmaceutical Sciences, 2022: 1-12.

Congress Presentations

Poster Presentation:

- A Jahanian-Najafabadi, R Ghavimi, V Akbari. In vitro and in vivo cytolethal and antitumor effects of a novel fusion protein targeting IL-24 toward breast cancer cells. Targeted Anticancer Therapies Congress (TAT) 02-04 March 2020, Paris.
- Vajihe Akbari, Mina Ahmadian, Ali Jahanian-Najafabadi. Improvement of refolding and recovery of hGM-CSF from inclusion bodies using response surface methodology. The 2nd International Congress onPharmacy Update (2019).
- Ekhlasi Z, Akbari V. Evaluation of soluble expression of single-chain antibody fragment against human epidermal growth receptor 2 (HER2) by three different E. coli strain. The 15th Iranian National Congress of Biochemistry and the 6th International Congress of Biochemistry and Molecular Biology (2018).
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- Vajihe Akbari, Absaleh Avand. In virto cytotoxic activity of a Lactococcus lactis antimicrobial peptide against breast cancer cells. The 15th Iranian Pharmaceutical Sciences Congress (2017).
- Mahshid Abedi, Afsaneh Yegdaneh, Vajihe Akbari. Isolation and Elucidation of Monogalactosyldiacylglycerols from the Seaweed Gracilaria corticata. The 20th Seminar of Iranian Pharmacy Students. (2017).
- Javad Salehinia, Vajihe Akbari. Optimization of inclusion body solubilizing of a single-chain Fv antibody fragment specific for domain II of HER2 receptor in Escherichia coli. The 20th Seminar of Iranian Pharmacy Students. (2017).
- Ghazaleh minaiyan, Vajihe akbari. "VEGF targeted therapy in combination with Capecitabine as a regimen of choice in patients with Metastatic Breast Cancer: A systematic review" The 14th Iranian Pharmaceutical Sciences Congress (2015).
- Feizizadeh Sahar, Abbas Jafarian Dehkordi, Daryoush Abedi, and Vajihe Akbari. "Evaluation of antibacterial activity of Lactobacillus delbrueckii susp bulgaricuis against Escherichia coli" ECB15, 15th European Congress on Biotechnology, Istanbul, Turkey, 23-26 Sep. 2012. The abstract was indexed by New Biotechnology 29 (2012): S126-S127.

- Akbari Vajihe, Daryoush Abedi, Hamid Mir Mohammad Sadeghi, Abbas Jafrian-Dehkordi, and Perry Chou. "Cloning, expression and purification of a single chain variable fragment antibody against Her2 in Escherichia coli." ECB15, 15th European Congress on Biotechnology, Istanbul, Turkey, 23-26 Sep. 2012. The abstract was indexed by New Biotechnology 29 (2012): S117.
- V. Akbari, H. Sadeghi, D. Abedi, A. Pardakhty, S. Shafizadegan, Antimicrobial properties of non-ionic surafactant vesicles containing ciprofloxacin, The 12th Iranian Pharmaceutical sciences conference. The abstract was indexed by Research in Pharmaceutical Sciences, 2012; 2012;7(5) S15.
- Jafarian Dehkordi, D. Abedi, V. Akbari, S. Feizizadeh, Evaluation of anti-bacterial and anti-adherence properties of Lactobacillus delbrueckii susp bulgaricuis on Escherichia coli, The 12th Iranian Pharmaceutical sciences conference. The abstract was indexed by Research in Pharmaceutical Sciences, 2012; 2012;7(5) S411.
- Akbari.V, Sadeghi. H, Abedi. D, Pardakhty.A (2011). *In-vitro* antimicrobial activity of niosomal ciprofloxacin in comparison with free ciprofloxacin . The 1th Internarional and 12th Iranian congress of microbiology (international).
- Akbari.V, Pardakhty.A, Moshafi.M.H (2010). Preparation, characterization and cytotoxicity evaluation of ciprofloxacin loaded niosomes . The 12th Iranian Pharmaceutical sciences conference (international).
- Akbari.V, Pardakhty.A, Moshafi.M.H (2008). Intracellular delivery of niosomal ciprofloxacin in J774 cell line. The 11th Iranian Pharmaceutical sciences conference (international).
- Akbari.V, Pardakhty.A, Moshafi.M.H (2006). Formulation of non ionic surfactant vesicles (niosom) containing ciprofloxacin. The 12th Seminar of Iranian Pharmacy Students.
- Akbari.V, Mehrabani.M, Moshafi.M.H (2005). Evaluation of antibacterial effect of *Maclura pomifera* extract by cylinder plate method. The 11th Seminar of Iranian Pharmacy Students.

Electronic Poster Presentation at Conferences:

- Akbari.V, Mofid MR. (2011). Binding mode of microtubule stabilizing agents to yeast tubulin. The 12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry and Molecular Biology. (international) The abstract was indexed by *Clinical Biochemistry*, Volume 44, Issue 13, Supplement, September 2011, Page S101

Oral Presentaion at Conferences:

- Akbari.V, Pardakhty.A, Moshafi.M.H (2007). Enhancement of encapsulation efficacy of ciprofloxacin in noiosomal vesicles by remote loading method. The 13th Seminar of Iranian Pharmacy Students.
- Vajihe Akbari. Probiotics positive impact on cardiovascular risk factors. Updates on Functional Food & Health Supplements. 27 & 28 October 2017. United Arab Emirates, Dubai.

Research and Projects as a PI:

No	Title	Director	Date	Grant
1	Antimicrobial evaluation of ciprofloxacin loaded niosomes against intracellular *Staphylococcus aureus* infection in mouse J774 macrophages	Second director	2010	University of Medical Sciences **(**Isfahan, Iran)

2	Construction, expression and biological activity evaluation of a single-chain Fv antibody fragment specific for domain II of HER2 receptor in *Escherichia coli*	Second director	2011	University of Medical Sciences **(**Isfahan, Iran**)**
3	Expression and biological activity evaluation of recombinant granulocyte-macrophage colony-stimulating factor (rGM-CSF) in *Escherichia coli*	Director	2015	University of Medical Sciences **(**Isfahan, Iran**)**
	Expression of interferon β-1-a and optimization of culture conditions in *Pichia pastoris*	Director	2016	University of Medical Sciences **(**Isfahan, Iran**)**
	A systematic review and meta-analysis on beneficial effect of probiotic on type 2 diabetic patients	Director	2016	University of Medical Sciences **(**Isfahan, Iran**)**
	Production of the recombinant vector expressing DFF40 under the control of survivin promoter for gene therapy of cancer	Directior	2017	Natinoal Institute for Medical Reseach Development
	Nanoparticle-based delivery of tumor antigens for dendritic cell-based immunotherapy of mouse breast cancer: in vitro and in vivo evaluation	Director	2019	University of Medical Sciences **(**Isfahan, Iran**)**
	Construction of a tandem scFv antibody for simultaneously targeting of two immune system checkpoints, CTLA-4, PD-1	Director	2019	University of Medical Sciences **(**Isfahan, Iran**)**

Patent

Single chain antibody specific for HER2

Iran patent patent number:80466

Awards and Honors:

Rewarded for been the third researcher among faculty members of Isfahan Faculty of Pharmacy (2017)

Rewarded for been the third researcher among young faculty members of Isfahan Faculty of Pharmacy (2016)

Rewarded for been the best graduate teaching assistant of Isfahan Faculty of Pharmacy (2011)

Rewarded for been the best student researcher of Isfahan Faculty of Pharmacy (2010)

Rewarded for been second in 16^{th} generation of graduated students of Pharmacy of Kerman university of medical science.

Rewarded for been third in pharmaceutics science of the 12^{th} Seminar of Iranian Pharmacy Students.

Rewarded for been fifth in 22^{th} exam of pharmaceutical basic science of Iranian pharmacy students.

Fields of interest:

- Expression and purification of therapeutic proteins in prokaryote and eukaryote hosts.
- Expression of fusion proteins containing antibody fragments and their *in vitro* and *in vivo* evaluation.
- Immonutherapy of cancer (with emphasis on cell therapy)
- Gene therapy and targeted gene delivery to cancer cells
- Targeted delivery systems for anticancer drugs and vaccines.