In the name of GOD

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Professional Appointments

2023-now	**Full professor** Biotechnology Research Center Pasteur Institute, Tehran, Iran
2017-2023	**Associate professor** Biotechnology Research Center Pasteur Institute, Tehran, Iran
2011-2017	**Assistant professor** Biotechnology Research Center Pasteur Institute, Tehran, Iran

Formal Qualification

2004-2010	**Ph.D.** Pharmaceutical Biotechnology Pasteur Institute of Iran Grade point average:18.54/20 top student Thesis grade:19.5/20
1998-2003	**Pharm.D**.; Pharmacy School Tehran University of Medical Science Grade point average:17.18/20 (top 5%) Thesis grade:19.8/20

Science Diploma (high school, grade average:19.7: 1998)
Rank 119 in the national university entrance examination (science group)and the first rank in the pharmacy faculty of Tehran
Proficiency certificate in English,1997;Completion of 15- semester course at Iran Language Institute, IELTS :7.5,

Formal Extracurricular Training and Educational Courses

26-28 Feb. 2013	**World cell culture congress, Terrapin** Munich, Germany.
24-25 Oct. 2012	**Bioproduction, Informa Life Science** Berlin, Germany
13-17 Feb. 2012	**Cell line development and Engineering** Cologne, Germany
19-20 May. 2011	**Animal Cell Culture workshop, Sartorius Stedim Biotech.** Goettingen, Germany
14 -July. 2011	**Entrepreneurial Finance workshop** Sharif University of Technology
12-16 Jun. 2010	**Monoclonal Antibody Production** Avicenna Research Institute
1-2 Nov. 2008	**International seminar and workshop on Preparation, Filling and granting of international patents** Tehran, Iran
July. 2006	Workshop on **bioinformatics:** IBB Center ,Tehran University of Science
Feb. 2004	**Artificial neural network** workshop Tehran University of Medical Science, faculty of Pharmacy,

Research Appointments

Oct.2009 to April	**Sabbatical leave** as an international visiting student, Laboratory of Cellular Biotechnology (LBTC), Ecole Polytechnique Federate de Lausanne, Switzerland, Focused area of research; expression of Recombinant Proteins from Mammalian cell cultures; under supervision of Professor **Florian Wurm**
2003-2004	Collaboration and associate researcher, project entitled ”Investigation of Industry and University Partnership ”Vice-chancellor for research of Tehran University of Medical Science: University-Industry relationship office. Under supervision of **Dr Rasul Dinarvand**

Patents

2017	Simultaneous use of peptide sequences 2A , Furin enzyme position and CHEF Promoter in construction of a vector for production of Monoclonal Antibodies , **Patent No. 91519.**
2013	US Patent:United States Patent and Trademark Office. Filling date: 7/27/2011. **Application Number: 13/191,933,** "Chimeric Truncated and mutant variant of Tissue Plasminogen Activator (t- PA) resistant to plasminogen activator inhibitor-1"
2013	A dual-SUMO vector for the expression of the Fab antibody fragment in *E.coli* cytoplasm. Khalaj V., Davami F., Rezaee F. **Patent No. 81815.**
2011	A mutant truncated variant from tissue plasminogen activator resistant to PAI-1. MahboudiF., **Davami F**., Barkhordari F.. Sardari S. Adeli A**. Patent No. 70454**
2010	A novel variant of tissue plasminogen activator t-PA with improved pharmacodynamic properties; Expression in CHO based on in Silico design. Mahboudi F., **Davami F**., Barkhordari F., Majidzadeh-A K. Adeli A. **Patent No. 62959, Jan.**
2009	Production of Disulfide Bands during recombinant protein production in Escherichia Coli. Majidzadeh-A K., Mahboudi F., Barkhordari F., **Davami F**. **Patent No.59374, Jun.**

Publications:

1. Efficient site-specific integration in CHO-K1 cells using CRISPR-Cas9 modified donors. Mohammad Hassan Kheirandish, Behnaz Rahmani, Hossein Zarei Jaliani, Farzaneh Barkhordari, Mohammad Ali Mazlumi*, Fatemeh Davami*.Molecular Biology Reports. 2023 Accepted, https://doi.org/10.1007/s11033-023-08529-8
2. Bacterial expression of TMTP1 fused L-asparaginase for targeting leukemia and metastatic tumor cells, Mohammad Hassan Kheirandish, Abdolnabi Tollabi, Fatemeh Davami, Behnaz Rahmani, Negin Sadat Hashemi, Javad Behroozi, Hossein Zarei Jaliani, ACTA MEDICA IRANICA , 2023 Accepted.
3. Production and characterization of a camelid single domain anti-CD22 antibody conjugated to DM1, Vahab Ziaei, Alireza Ghassempour, Fatemeh Davami, Bahareh Azarian, Mahdi Behdani, Hamed Dabiri & Mahdi Habibi-Anbouhi, Molecular and Cellular Biochemistry ,2023 accepted
4. Targeting DNA repair pathways with B02 and Nocodazole small molecules to improve CRIS-PITCh mediated cassette integration in CHO-K1 cells, Behnaz Rahmani, Mohammad Hassan Kheirandish, Samaneh Ghanbari, Abbasali Raz, Fahimeh Shamsi & Fatemeh Davami *Scientific Reports volume 13, Article number: 3116 (2023)
5. Targeted integration in CHO cells using CRIS-PITCh/Bxb1 recombinase-mediated cassette exchange hybrid system, Applied Microbiology and Biotechnology, Samaneh Ghanbari; Elham Bayat; Masoumeh Azizi; Pezhman Fard-Esfahani; Mohammad Hossein Modarressi; Fatemeh Davami*, *Appl Microbiol Biotechnol. 2023 Feb;107(2-3):769-783.*

6. CRISPR-interceded CHO Cell Line Development approaches, Shahin Amiri, Setare Adibzadeh, Samaneh Ghanbari, Behnaz Rahmani, Mohammad Hassan Kheirandish, b, Aref Farokhi-Fard, Mansoureh Shahbazi Dastjerdeh, Fatemeh Davami*, Biotechnology and Bioengineering, 2023. 120 (4), 865-902
7. Direct detection of TNF-α by copper benzene tricarboxylate MOFs/gold nanoparticles modified electrochemical label-free immunosensor using FFT admittance voltammetry, Mehrnaz Ebrahimi a, Parviz Norouzi, Fatemeh Davami , Alireza Bonakdar , Mahya Asgharian Marzabad ,Omid Tabaei , Journal of Electroanalytical Chemistry 925 (2022) 116897.
8. Bacterial production and biophysical characterization of a hard-to-fold scFv against myeloid leukemia cell surface marker, IL-1RAP",surface marker, IL-1RAP, Aref Farokhi-Fard ,Elham Bayat , Arezoo Beig Parikhani , Samira Komijani , Hooman Aghamirza Moghim Aliabadi, Soroush Sardari , Behrouz Gharib , Farzaneh Barkhordari , Kayhan Azadmanesh , Morteza Karimipoor , Haleh Bakhshandeh , Fatemeh Davami*. Mol Biol Rep, 2022 Nov 26. doi: 10.1007/s11033-022-07972-3
9. Optimization of expression yield in a stable cell line expressing a novel mutated chimeric tissue plasminogen activator (mt-PA). Mozhgan Raigani, Farzaneh Barkhordari, Reza Moazzami, Fatemeh Davami1*, Fereidoun Mahboudi1*. Brazilian Journal of Pharmaceutical Sciences, VOL. 58 • 2022 • https://doi.org/10.1590/s2175-97902022e19692
10. Characterization of a novel mCH3 conjugated anti-PcrV scFv molecule, Samira Komijani, Elham Bayat, Elham Rismani , Soma Hosseini, Reza Moazzami, Leila Nematollahi , Soroush Sardari , Yeganeh Talebkhan*, Fatemeh Davami*, Farzaneh Barkhordari, Fakhrisadat Hosseini1 & Hoda Jahandar Scientific Reports | (2021) 11:7154
11. Anti-Aβ-scFv-loaded polymeric nano-micelles with enhanced plasma stability Farnaz Sotoudegan, Farzaneh Sotoudegan, Yeganeh Talebkhan Garoosi, Sahar H. Afshar, Farzaneh Barkhordari and Fatemeh Davami *, Journal of Pharmacy and Pharmacology, 2021, Vol 73, 460–472
12. Production of an Antibody Fragment (scFv) Targeting PcrV Protein of Pseudomonas aeruginosa in Fed-Batch Cultivation Mode, Saba Karam , Mozhgan Raigani , Sahar Hassani Afshar , Yeganeh Talebkhan, Elham Bayat , Samira Komijani , Leila Nematollahi, Farzaneh Barkhordari , Mehdi Shafiee Ardestani and Fatemeh Davami*, Iranian Biomedical Journal 25 (6): 390-398 November 2021
13. Woodchuck Hepatitis Virus Post-Transcriptional Regulation Element (WPRE) Promotes Anti-CD19 BiTE Expression in Expi293 Cell, Reza Moazzami, Hasan Mirzahoseini, Leila Nematollahi , Farzaneh Barkhordari, Mozhgan Raigani , Fatemeh Hajari Taheri, Fereidoun Mahboudi and Fatemeh Davami*, Iranian Biomedical Journal 25 (4): 275-283 July 2021

14. A Comparative Investigation of the Bispecific Antibody: Expression in Expi293F Cells and E.coli, Reza Moazzami , Hasan Mirzahosaini , Fatemeh Naddafi , Fatemeh Davami*, The horizon of Medical Science. July 2021. Vol 27. Issue 3
15. Targeted integration into pseudo attP sites of CHO cells using CRISPR/Cas9. Sana Pourtabatabaei , Samaneh Ghanbari , Narges Damavandi , Elham Bayat , Mozhgan Raigani , Sirous Zeinali , Fatemeh Davami*, Journal of Biotechnology, Volume 337, 20 August 2021, Pages 1-7
16. DARPin Ec1-LMWP protein scaffold in targeted delivery of siRNA molecules through EpCAM cancer stem cell marker, Nikta Babaee, Yeganeh Talebkhan Garoosi, Morteza Karimipoor, Fatemeh Davami, Elham Bayat,

Hossein Safarpour, Fereidoun Mahboudi & Farzaneh Barkhordari, **Molecular Biology Reports** (2020), Published: 26 September 2020

17. Construction of a mammalian ires-based expression vector to amplify a bispecific antibody; blinatumomab, Naddafi, F., Davami, F., Tabarzad, M., Barkhordari, F., Shirazi, F.H., Iran J Pharm Res. 2019 Autumn; 18(4): 2117–2123.
18. Novel trastuzumab-DM1 conjugate: synthesis and bioevaluation; Mehri Abedi ,Reza Ahangari Cohan , Fereidoun Mahboudi , Mohammad Ali Faramarzi , Ramin Fazel , Narges Damavandi , Mehdi Shafiee Ardestani, Fatemeh Davami*, Journal of Cellular Physiology, 2019 Aug;234(10):18206-18213.
19. Comparison of Polystyrene versus Cycloolefin Microplates in Absorbance Measurements in the UV/VIS Region of the Spectrum, Mehri Abedi, Reza Ahangari Cohan, Mehdi Shafiee Ardestani, Fatemeh Davami*, J Shahrekord Univ Med Sci. 2019;21(3): 110-113.
20. MALDI-MS: a Rapid and Reliable Method for Drug to Antibody Ratio Determination of Antibody Drug Conjugates, Mehri Abedi, Reza Ahangari Cohan, Fereidoun Mahboudi, Mehdi Shafiee Ardestani* and Fatemeh Davami1*, Iran Biomed J . 2019 Nov;23(6):395-403.
21. Enhancing bioactivity, physicochemical, and pharmacokinetic properties of a nano-sized, anti-VEGFR2 Adnectin, through PASylation technology, Safieh Aghaabdollahian, Reza Ahangari Cohan, Dariush Norouzian, Fatemeh Davami, Mohammad Reza Asadi Karam, Fatemeh Torkashvand, Golnaz Vaseghi, Reza Moazzami & Sakineh Latif Dizaji, Scientific Reports,(2019) 9:2978
22. A comparative study of the bispecific monoclonal antibody, blinatumomab expression in CHO cells and E. coli, Fatemeh Naddafi, Farshad Shirazia, Yeganeh Talebkhan, Maryam Tabarzad, Farzaneh Barkhordari, Zahra Aliabadi Farahani, Elham Bayatb, Reza Moazzami, Fereidoun Mahboudi, and Fatemeh Davami*, Preparative iochemistry & Biotechnology , 2018, Vol. 48, No.10, Pages 961-967.
23. Proteomics investigation of molecular mechanisms affected by EnBase culture system in Anti-VEGF fab fragment producing E. coli BL21 (DE3), Bahareh Azarian , Amin Azimi, Mahboobeh Spehri, Vahideh Samimi-fam, Faegheh Rezaee, Yeganeh Talebkhan, Vahid Khalaj, Fatemeh Davami*, Preparative Biochemistry & Biotechnology , 2018, Vol. 49, No.1, Pages 48-57
24. Optimization of EnBase Fed-Batch Cultivation to Improve Soluble Fraction Ratio of α-Luffin Ribosome Inactivating Protein, Farzaneh Barkhordari; Mozhgan Raigani; Yeganeh Yeganeh Talebkhan Garoosi; Fereidoun Mahboudi; Fatemeh Davami*, Iranian J Biotech. 2018 January;16(1):e1482
25. Cloning and soluble expression of mature alpha-Luffin from Luffa cylindrica in E. coli using SUMO fusion proteins. Shaghayegh Namvar, Farzaneh Barkhordari, Mozhgan Raigani, Hoda Jahandar, Leila Nematollahi, Fatemeh Davami*, Turk J Biol. Available online: 14.11.2017
26. Rapid characterization of the CHO platform cell line and identification of pseudo attP sites for PhiC31 integrase, Damavandi N, Raigani M, Joudaki A, Davami F*, Zeinali S*. Protein Expr Purif. 2017 Dec;140:60-64
27. Evaluating the efficiency of CHEF and CMV promoter with IRES and Furin/2A linker sequences for monoclonal antibody expression in CHO cells, Saeedeh Ebadat, Samira Ahmadi, Maryam Ahmadi, Fatemeh Nematpour, Farzaneh Barkhordari, Reza Mahdian, Fatemeh Davami* , Fereidoun Mahboudi *, PLoS ONE Published: October 12, 2017
28. Monoclonal antibodies expression improvement in CHO cells by PiggyBac transposition regarding vectors

ratios and design . Samira Ahmadi , Fatemeh Davami ,Maryam Ahmadi , Saeedeh Ebadat , Fatemeh Nematpour, , N. Davoudi, Fereidoun Mahboudi *, PLoS ONE Published: June29, 2017

29. Optimization of monoclonal antibody expression in CHO cells by employing epigenetic gene regulation tools Journal: Turkish Journal of Biology, Fatemeh NEMATPOUR1, Fereidoun MAHBOUDI1, Vahid KHALAJ1, Behrouz VAZIRI, Samira AHMADI1, Maryam AHMADI2, Saedeh EBADAT1, Fatemeh DAVAMI * , Turk J Biol, (2017) 41: 622-628
30. PhiC31 integrase can improve the efficiency of different construct designs for monoclonal antibody expression in CHO cells, Protein Expression and Purification, Maryam Ahmadi , Fereidoun Mahboudi , Samira Ahmadi , Saeedeh Ebadat , Fatemeh Nematpour, , Mohammad Reza Akbari Eidgahi , Fatemeh Davami* 134 (2017) 89- 95.
31. Cytosolic expression of functional Fab fragments in Escherichia coli using a novel combination of dual SUMO expression cassette and EnBase_ cultivation mode F. Rezaie, F. Davami, K. Mansouri, S. Agha Amiri, R. Fazel, R. Mahdian, N. Davoudi, S. Enayati, M. Azizi and V. Khalaj, J. Applied Microbiology. 2017 May 8.
32. Scale up and pharmacokinetic study of a novel mutated chimeric tissue plasminogen activator (mt-PA) in rats. Mozhgan Raigani, Mohammad-Reza Rouini, Ali-Akbar Golabchifar, Esmat Mirabzadeh1, Behrouz Vaziri, Farzaneh Barkhordari, Fatemeh Davami* & Fereidoun Mahboudi* . Scientific Reports, 22 Feb. 2017.
33. Evaluating the expression profile and stability of different UCOE containing vector combinations in mAb-producing CHO cells, BMC Biotechnology, Fatemeh Nematpour; Fereidoun Mahboudi; Behrouz Vaziri; Vahid Khalaj; Samira Ahmadi; Maryam Ahmadi; Saeedeh Ebadat; Fatemeh Davami*, 2017 Feb 22;17(1):18
34. Proteomics Profiling of Chimeric-Truncated Tissue Plasminogen activator Producing- Chinese Hamster Ovary Cells Cultivated in a Chemically Defined Medium Supplemented with Protein Hydrolysates, Bahareh Azarian, Seyedeh Matin Sajedin, Amin Azimi, Mozhgan Raigani, Behrouz Vaziri and Fatemeh Davami*,Iranian Biomedical Journal. Feb , 2017
35. Evaluating the efficiency of phiC31 integrase-mediated monoclonal antibody expression in CHO cells Authors: Maryam Ahmadi, Fereidoun Mahboudi, Mohammad Reza Akbari Eidgahi, Reza Nasr, Fatemeh Nematpour, Samira Ahmadi, Saeedeh Ebadat, Mojtaba Aghaeepoor, Fatemeh Davami*, First published: 30 September 2016, Biotech Progress .
36. Designed Amino Acid Feed in Improvement of Production and Quality Targets of a Therapeutic Monoclonal Antibody, Fatemeh Torkashvand, Behrouz Vaziri*, Shayan Maleknia, Amir Heydari, Manouchehr Vossoughi, Fatemeh Davami, Fereidoun Mahboudi*, PLOS ONE, Accepted, Sep. 2015.
37. Utilization of Site-specific Recombination in Biopharmaceutical Production, Maryam Ahmadi, Narges Damavandi, Mohammad Reza Akbari Eidgahi , Fatemeh Davami *. Iranian Journal of Biotechnology, 2015 Summer;4(3):143-151
38. Low temperature cultivation increases soluble fraction ratio of α-luffin ribosome inactivating protein in EnBase fed-batch culture, Farzaneh Barkhordari, Fatemeh Davami*, Yeganeh Talebkhan Garoosi , Fereidoun Mahboud, Iranian Journal of Biotechnolgy, 2017, Accepted
39. Anti-CD19 Monoclonal Antibodies: a New Approach to Lymphoma Therapy, Fatemeh Naddafi, Fatemeh Davami, Int J Mol Cell Med. 2015 Summer;4(3):143-151
40. Effects of peptone supplementation in different culture media on growth, metabolic pathway and

productivity of CHO DG44 cells; a new insight into amino acid profiles, Davami Fatemeh*, Eghbalpour Farnaz, Nematollahi Leila, Barkhordari Farzaneh, Mahboudi Fereidoun . Iranian Biomedical Journal 19 (4): (October 2015)

41. Expression of a Novel Chimeric-Truncated tPA in Pichia pastoris with Improved Biochemical Properties. Saadatirad, A., Sardari, S., Kazemali, M., Zarei, N., Davami, F., Barkhordari, F., Adeli, A., Mahboudi, F., Molecular Biotechnology, 2014 ,56(12), 1143-1150.
42. Peptone supplementation of culture medium has variable effects on the productivity of CHO cells, Fatemeh Davami, Lucia Baldi, Yashas Rajendra, Florian M. Wurm, Int J Mol Cell Med. 2014 Summer;3(3):146-56.
43. Effect of Peptone Feeding on Transient Gene Expression Process in CHO DG44, Fatemeh Davami , Farnaz Eghbalpour , Farzaneh Barkhordari and Fereidoun Mahboudi, Avicenna Journal of Medical Biotechnology, 2014, Vol 6, Issue 3- Sep.2014, 147-155
44. A fed-batch based cultivation mode in Escherichia coli results in improved specific activity of a novel chimeric-truncated form of tissue plasminogen activator. Mahboudi, F., Barkhordari, F., Godarzi, R.M., Enayati, S., Davami, F.*, Journal of Applied Microbiology , 114, Pages: 364-372, 2012
45. Periplasmic expression of a novel human bone morphogenetic protein-7 mutant in Escherichia coli Nematollahi, L., Khalaj, V. , Babazadeh, S.M., Rahimpour, A., Jahandar, H., Davami, F., Mahboudi, F., Avicenna Journal of Medical Biotechnology Volume 4, Issue 4, October 2012, Pages 178-185
46. Combined TGE-SGE Expression of Novel PAI-1-Resistant t-PA in CHO DG44 Cells Using Orbitally Shaking Disposable Bioreactors. Davami F, Barkhordari F, Alebouyeh M, Adeli A, Mahboudi F. J Microbiol Biotechnol. 2011 Dec;21(12):1299- 305.
47. A novel variant of t-PA resistant to plasminogen activator inhibitor-1; expression in CHO cells based on in silico experiments. Davami F, Sardari S, Majidzadeh-A K, Hemayatkar M, Barkhordari F, Enayati S, Adeli A, Mahboudi F. BMB Rep. 2011 Jan;44(1):34-9
48. Expression of a Novel Chimeric Truncated t-PA in CHO Cells Based on in Silico Experiments, Davami F., Sardari S., Majidzadeh A. K., Hemayatkar M., Barkhrdari F., Omidi M., Azami M., Adeli A., Davoudi N., and Mahboudi F. J Biomed Biotechnol. 2010; Sep 22.
49. Cloning and Expression of Functional Full-Length Human Tissue Plasminogen Activator in Pichia pastoris Majidzadeh-A K., Khalaj V. , Davami F. & Hemayatkar M. ,Barkhordari F. , Adeli A., Mahboud F. Appl Biochem Biotechnol. 2010 May , 2037- 48
50. Increased expression of recombinant human tissue plasminogen activator in Leishmania tarentolae. Mahdi Hemayatkar, Fereidoun Mahboudi, Keivan Majidzadeh, Fatemeh Davami, Behrouz Vaziri, Farzaneh Barkhordari, Ahmad Adeli, Reza Mahdian and Noushin Davoudi, Biotechnol. J. 2010, 5, 1198-206
51. Human Tisssue Plasminogen Activator Expresssion in Escherichia coli using cytoplasmic and periplasmic cumulative power, Majidzadeh-A K., Mahboudi K. , Hemayatkar M. , Davami F. , Barkhordary F., Adeli A., Soleimani M , Davoudi N., and Khalaj V., Avicenna J Med Biotech 2010; 2(3): 131-136
52. Simultaneus Spectrophotometric Determination of Mixtures of Food Colorants, Oveisi M.R., Hajmahmoudi M., Davami F. DARU 2003; 11(1):1

Published Books

1. **THE DEVELOPMENT OF SCIENCE AND TECHNOLOGY IN IRAN**, Chapter 9; The Pharmaceutical Industry in Iran: Background and Technology Trends that Will Reshape the Market , Alireza Zaharee and Fatemeh Davami , 2016, published by Springer Nature

2. **Targeted therapy in cancer; a special look to monoclonal antibody-based clinical approaches.** Authors: Dr F. Davami, Dr Y. Talebkhan, S. Saberi**.**

3. **Monoclonal antibodies; a novel challenge in the field of biotechnology. Authors: Dr F. Davami, A. rahimpoor, Dr L. Nematollahi, Dr H. Jahandar.**

Abstracts

1) A novel tethering approach using monomeric streptavidin improves CRISPR-Cas9 genome editing efficiency in CHO cell, The 5th International Congress on Biomedicine (ICB2021) 10th - 19th November 2021 – Virtual, Mohammad Hassan Kheirandish, Behnaz Rahmani, Mohammad Ali Mazlomi, Hossein Zarei Jaliani, Fatemeh Davami*
2) Design and construction of a universal payload vector for bxb1-based recombinase-mediated cassette exchange for targeting a transgene into a single locus in mammalian cell , Samaneh Ghanbari, Fatemeh Davami* The 5th International Congress on Biomedicine (ICB2021) 10th - 19th November 2021 – Virtual.
3) Investigating the effect of nocodazol small molecule on CRIS-PITCH efficiency for targeted integration of transgene Cassette in CHO cell, Behnaz rahmani, Mohammad Hassan Kheirandish, Fahime shamsi, Samaneh Ghanbari Mehrandooei, Fatemeh Davami*, The 5th International Congress on Biomedicine (ICB2021) 10th - 19th November 2021 – Virtual.
4) Successful production of soluble and active single domain antibody against human IL-1RAP (Research Paper) Aref Farokhi-Fard, Fatemeh Davami*, The 5th International Congress on Biomedicine (ICB2021) 10th - 19th November 2021 – Virtual.
5) Constructing a transposable vector containing both heavy and light chains of a therapeutic monoclonal antibody to target highly transcribed regions of the genome, Ahmadi S, Davami F, Davoudi N, , Azadmanesh K, Nematpour F and Mahboudi F. 21th International Iranian Congress of physiology and pharmacology, 23-27 Aug. 2013
6) Optimization of polyethylenimine-mediated transient gene transfection for a novel chimeric truncated tissue- Plasminogen Activator(t-PA) in CHO DG44 cells, Mozhgan Raigani, Fatemeh Davami, Samira Ahmadi, Fatemeh Nematpour,Faegheh Rezaei, Fereidon Mahboudi , 21th International Iranian Congress of physiology and pharmacology, 23-27 Aug. 2013
7) Construction of UCOE containing expression vectors for enhanced recombinant monoclonal antibody production in mammalian expression systems, Nematpour F, Davami F, Ahmadi S., Rezaei F, Raygani M , and Mahboudi F. 21th International Iranian Congress of physiology and pharmacology, 23-27 Aug. 2013

8) Design of new dual SUMO vector for expression of anti-VEGF antibody fragments (Fab) in E. coli cytoplasm, Rezaie F, Davami F, Nematpour F, Ahmadi S, Raygani M, Khalaj V, 21th International Iranian Congress of physiology and pharmacology, 23-27 Aug. 2013

9) Using design of experiments (DoE) as a potential tool for developing an optimized supplementation of a serum-free medium for the production of tissue plasminogen activator (t-PA), S. Matin Sajedin , Mozhgan Raigani, Farzaneh Barkhordari, Fatemeh Davami, 21th International Iranian Congress of physiology and pharmacology, 23-27 Aug. 2013

10) Feeding strategy effect on optimization of TGE (Transient Gene Expression) for Recombinant Protein Production in mammalian cell culture, Eghbalpour F, Barkhordari F, Davami F. 8th National Biotechnology Congress of Iran, 6-10 July 2013.

11) Optimization of TGE (Transient Gene Expression) for Recombinant Protein Production in mammalian cell culture, Eghbalpour F, Barkhordari F, Davami F. 8th National Biotechnology Congress of Iran, 6-10 July 2013.

12) Investigating the effect of 4 different peptone agent on cellular growth and protein production of CHO DG44 cells by purpose to optimizing the best condition, Sajedin S. M, Raygani F, Eghbalpour F, Barkhordari F, Davami F. 8th National Biotechnology Congress of Iran, 6-10 July 2013.

13) Effect of culture medium supplementation with different peptone concentrations on growth profile and protein productivity of t-PA producing CHO cells. Ehghaghi A, Eghbalpour F, Barkhordari F, Davami F. 17th National and 5th International Iranian biology conference, 14-16 Sep 2012

14) Effects of peptone supplementation of culture medium on growth profile and productivity of CHODG44 cells. Eghbalpour F, Ehghaghi A. Barkhordari F, Moghbeli M, Davami F, 17th National and 5th International Iranian biology conference, 14-16 Sep 2012

15) In silico design and modeling of chimeric-truncated tissue plasminogen activator (t-PA) with enhanced pharmacodynamic properties towards preserving the thrombolytic activity, The 1st International Congress on Health Genomics and Biotechnology24-27 Nov.2007, Summit Meeting Conference Hall ,Tehran,Iran

16) Poster Presentation, entitled:"Designing a chimeric-truncated plasminogen activator (t-PA) gene-cassette in order to improve pharmacodynamic properties" The 1st International Congress on Health Genomics and Biotechnology24-27 Nov.2007, Summit Meeting Conference Hall ,Tehran,Iran

17) Designing a cassette gene system for a chimeric-truncated plasminogen activator using splicing by overlap extension PCR, International Symposium "Recombinant Antibodies: new developments for future challenges" Centro national de Investigationes Oncologicas (CNIO) , October 20-22, 2008, Madrid –Spain

18) Spectrophotometric Determinatin of Mixed colorants using chemometric methods. 8th Ibn Sina International Conference on pure and applied heterocyclic Chemistry, Egypt, February 16-19,2002

19) Designing a cassette gene system for a chimeric-truncated plasminogen activator using splicing by overlap extension PCR, ID:1201, The 6th National Biotechnology Congress of I.R. Iran, 13-15 August 2009 T

Master Thesis Supervisor

1. Site-specific integration of GFP reporter gene in CHO cells mediated by CRISPR/Cas9 system
2. Anti-Aβ-scFv loaded Polymeric Nano-Micelles with enhanced plasma stability
3. Investigating proteomics profile changes in conventional Batch and Fed-batch cultivation modes before the fast growth phase in a recombinant E. coli producing anti-VEGF Fab fragment.
4. Investigating proteomics profile changes in conventional Batch and Fed-batch cultivation modes after fast growth phase in a recombinant E.coli producing anti- VEGF Fab fragmen.
5. Study of anatomical structure of Luffa cylindrical (L.), cloning and expression of α- Luffin gene in E.coli and investigating expression

changes in Batch and Fed-batch mode of culture.

6. Cloning and soluble expression of mature a-luffin from Luffa cylindrica in E.coli using SUMO fusion protein and rhamnose tunable promoter system.
7. Investigating the effect of peptone supplementation on cellular growth and protein production of CHO DG44 cells and optimizing the best condition based on DOE predictions.
8. Optimization of TGE (Transient Gene Expression) for Recombinant Protein Production in mammalian cell culture: Bioprocess Scale-up.
9. Optimization of Recombinant Protein Production in mammalian cells cultured in shaker incubator and investigating the production in *E.coli*

Ph.D Thesis Advisor

1. Designing of PASylated C7+ form and investigating its physicochemical and bioactivity properties.
2. Optimization of a recombinant mAb expression in CHO cell line using Design of Experiment (DOE) methods and proteomics analysis of CHO cell line in optimized culture media.
3. Survey Effect of Notch siRNA Conjugated to Protamine and Low Molecular Weight Protamine (LMWP) Nanocarriers on Cancer Cells via Targeted EpCAM Cancer Stem Cells (CSCs) Marker by Ec1 DARPin Scaffold Protein.
4. Expression of humanized monoclonal antibody Omalizumab against IgE in CHO cell line and evaluation of the effect of Ubiquitous Chromatin-Opening Elements (UCOEs) on expression level and on their clones.
5. A novel dual SUMO vector for Fab antibody fragments expression in E. coli cytoplasm via a fed-batch glucose slow release cultivation mode, evaluating the effect on expression level, proper folding and efficacy of the Fab fragment.
6. A new gene expression system to enhance gene expression in CHO cells.
7. Pharmacokinetic analysis of a novel chimeric-truncated t-PA in rats.
8. Design of a chimeric long- acting bovine follitropin

Ph.D Thesis Supervisor

1) Site-specific integration of GFP reporter gene mediated by Tild-CRISPR and RNP approach using cyclodextrin-based nano delivery system in CHO mammalian cells
2) Construction of the CHO Cell Platform Carrying the Bxb1 Integrase Targeting Site Using CRIS-PITCh and RNP Based Delivery Method and Recombinase Mediated Caset Exchange with Artificial Multi-miR Sponge.
3) Targeted insertion of GFP reporter gene using Tild-CRISPR system with Tethering approach in CHO cell line
4) Investigating the effect of small molecules on CRIS-PITCH efficiency for targeted integration of Bxb1 containing DNA Landing pad into CHO cell for development of cell platform
5) Construction of the CHO Cell Platform Carrying the Bxb1 Integrase Targeting Site Using CRIS-PITCh and RNP Based Delivery Method and Recombinase Mediated Cassette Exchange with Artificial Multi-miR Sponge
6) Engineering of CHO cell line for the enhancement of therapeutic recombinant protein production
7) Development of a platform CHO cell line for targeted integration of a transgene using CRIS-PITCh and RMCE hybrid system
8) Design, construction and evaluation of a novel pegylated nano-gene delivery platform directed against myeloid leukemia stem cells.
9) Site-specific integration of GFP reporter gene in CHO cells mediated by CRISPR/Cas9 system
10) Production of bi-specific anticancer antibody (Blinatumomab) against CD19 and CD3 in engineered CHO cells by establishing a targeted gene integration system.
11) Expression of a CD3/CD19 bispecific antibody in HEK 293 cell line and evaluation of the effect of WPRE element on expression level.
12) Construction of two **antibody drug conjugate (ADC)** against HER2+ metastatic breast cancer and comparative study of their effectiveness on breast cancer cell lines with different levels of HER2 expression.

13) A targeted gene integration system (phiC31 integrase) for production of a target monoclonal antibody.
14) Effect of concomitant use of CHYSEL peptide sequence (2A) and Transcription Regulatory Sequences from the Chinese Hamster EF-1 Gene (CHEF-1) on expression level of target monoclonal antibody.