



## Hassan Dianat-Moghadam

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## CURRICULUM VITAE

Last Update: 30 September, 2023

### CINTACT INFORMATION

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### PERSONALS

Date of birth: 21 March 1988

Gender: Male

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From: Nazmakan, Gachsaran, Kohgiluyeh and Boyer-Ahmad, Iran

### CURREBT APPOINTMENT

- Instructor of Laboratory, Department of Genetics and Molecular Biology, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran
- Joint appointment in Pediatric Inherited Diseases Research Center, Isfahan University of Medical Sciences, Isfahan, Iran
- Assistant professor, Department of Genetics and Molecular Biology, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran

## **AUTHORS' PROFILES SYSTEMS**

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## **EDUCATIONS**

- Doctor of Philosophy (PhD) in Medical Biotechnology 2016-2021, Tabriz University of Medical Sciences
- Master of Science (M.Sc.) Medical Biotechnology 2012-2015, Tehran University of Medical Sciences
- Bachelor of Science (B.Sc.) Laboratory Sciences 2010-2012, Shiraz University of Medical Sciences
- AD. in Laboratory Sciences, Shahid Sadoughi University of Medical Sciences, Yazd, 2007 to 2009

## **WORK EXPERINCES**

- Laboratory Technician, Microbiology portion, April 2013-September 2013, Tehran, Salamat Clinic, Shahr Rey-Javanmard Qassab
- Laboratory Technician, Hematology portion, May 2014-February 2014, Tehran, Specialized Obstetrics, Gynecology and Neonatology Shahid Akbarabadi Hospital

## **TECHING EXPRINCES**

- Teaching Molecular and Advanced Techniques to the BSc Students of Clinical laboratory sciences, Isfahan University of Medical Sciences, Isfahan, Iran, 2022
- Teaching Immuno-biochemistry and Analysis Methods to M.Sc. Students of Medical Biotechnology, Isfahan University of Medical Sciences, Isfahan, Iran, 2022-...

- Teaching Genetics of Cancer to M.Sc. Students of Medical Genetic, Isfahan University of Medical Sciences, Isfahan, Iran, 2023-...
- Teaching seminar I to M.Sc. students of Medical Genetic/Biotechnology, Isfahan University of Medical Sciences, Isfahan, Iran, 2023-...
- Teaching seminar I to M.Sc. students of Medical Biotechnology, Isfahan University of Medical Sciences, Isfahan, Iran, 2023-...
- Teaching cellular and molecular biology to the BSc students of clinical laboratory sciences, Isfahan University of Medical Sciences, Isfahan, Iran, 2023-...
- Teaching cellular biology to the BSc students of radiology, Isfahan University of Medical Sciences, Isfahan, Iran, 2023-...
- Teaching cellular and molecular biology to the M.Sc. students of medical microbiology, Isfahan University of Medical Sciences, Isfahan, Iran, 2023-...
- Teaching cellular and molecular biology to the M.Sc. students of medical biotechnology, Isfahan University of Medical Sciences, Isfahan, Iran, 2023-...

#### **SUPERVISER/ADVISOR/COWORKER**

- Design, construction, and characterization of a live attenuated Leishmania major and replacing knock out gene by LLO-BAX-R8, TK, and Polyepitop respectively; and evaluation of lesion size, parasite burden and cytokine pattern in Balb/c mice immunized by transgenic parasite and comparison with wild Leishmania major and evaluation of challenging response in immunized mice (MUI)
- Evaluation and comparison of Niclosamide and Trehalose alone and in combination with each other against standard Leishmania major in vitro and in vivo (MUI)

- Evaluation of Trehalose and Niclosamide, alone and in combination against Leishmania major in vitro (MUI)
- Evaluation the Inhibition of hsa-piR-333195 in Human Acute Myeloid Leukemia Cells (MUI)
- Design and manufacture a new Cornell dot to be used as a contrast agent for SLN mapping and image-guided surgery. NIMAD. Electronic Application NO: 4003321
- Immunotherapies targeting tumor vasculatures: challenges and opportunities. Electronic Application NO: IR.ARI.MUI.REC.1402.134

## PUBLICATIONS

- [1] M. Khalili, A. Zarebkohan, **H. Dianat-Moghadam**, M. Panahi, H. Andre, E. Alizadeh, Corneal endothelial cell sheet bioengineering from neural crest cell-derived adipose stem cells on novel thermo-responsive elastin-mimetic dendrimers decorated with RGD, *Chemical Engineering Journal*, 429 (2022) 132523. <https://doi.org/10.1016/j.cej.2021.132523>. **IF=13.2**
- [2] Mahmoudi, R., **Dianat-Moghadam, H.**\*, Poorebrahim, M. *et al.* Recombinant immunotoxins development for HER2-based targeted cancer therapies. *Cancer Cell Int* **21**, 470 (2021). <https://doi.org/10.1186/s12935-021-02182-6>. **IF=5.7**
- [3] Shahgolzari M, **Dianat-Moghadam H**, Fiering S. Multifunctional plant virus nanoparticles in the next generation of cancer immunotherapies. *Seminars in Cancer Biology*. 2021. <https://doi.org/10.1016/j.semcaner.2021.07.018>. **IF=15.7**
- [4] **Dianat-Moghadam, H.**, Khalili, M., Keshavarz, M. *et al.* Modulation of LXR signaling altered the dynamic activity of human colon adenocarcinoma cancer stem cells in vitro. *Cancer Cell Int* **21**, 100 (2021). <https://doi.org/10.1186/s12935-021-01803-4>. **IF=5.7**
- [5] **Dianat-Moghadam H**, Mahari A, Heidarifard M, et al. NK cells-directed therapies target circulating tumor cells and metastasis. *Cancer Letters*. 2021; 497: 41-53. <https://doi.org/10.1016/j.canlet.2020.09.021>. **IF=8.6**
- [6] Keshavarz, M., Ebrahimzadeh, M.S., Miri, S.M., **Dianat-Moghadam, H.**, et al. Oncolytic Newcastle disease virus delivered by Mesenchymal stem cells-engineered system enhances the therapeutic effects altering tumor microenvironment. *Virol J* **17**, 64 (2020). DOI: 10.1186/s12985-020-01326-w. **IF= 4.0**

[7] **Dianat-Moghadam, H.**; Azizi, M.; Eslami-S, Z.; Cortés-Hernández, L.E.; Heidarifard, M.; Nouri, M.; Alix-Panabières, C. The Role of Circulating Tumor Cells in the Metastatic Cascade: Biology, Technical Challenges, and Clinical Relevance. *Cancers* 2020, 12, 867. **IF= 6.6**

[8] M. Azizi, **H. Dianat-Moghadam**, R. Salehi, Masoud Farshbaf Disha Iyengar Samaresh Sau Arun K. Iyer Hadi Valizadeh Mohammad Mehrmohammadi Michael R. Hamblin, Iteractions Between Tumor Biology and Targeted Nanoplatforms for Imaging Applicationsdoin. DOI:10.1002/adfm.201910402. **IF=18.8**

[9] **H. Dianat-Moghadam**, M. Heidarifard, A. Mahari, M. Shahgolzari, M. Keshavarz, M. Nouri, Z. Amoozgar, TRAIL in oncology: From recombinant TRAIL to nano- and self-targeted TRAIL based therapies, *Pharmacological Research*, 2020, 155,104716,1043-6618, doi.org/10.1016/j.phrs.2020.104716. **IF= 7.6**

[10] Ayoubi-Joshaghani, M. H., **Dianat-Moghadam, H.**, Seidi, Kh., Jahanban-Esfahlan, A., Zare, P., Jahanban-Esfahlan, R., Cell-free protein synthesis: The transition from batch reactions to minimal cells and microfluidic devices, 117, 2020(4). P:1204-1229. **IF= 4.5**

[11] M. Keshavarz, A.S.M. Nejad, M. Esghaei, F. Bokharaei-Salim, **H. Dianat-Moghadam**, H. Keyvani, A. Ghaemi, Oncolytic Newcastle disease virus reduces growth of cervical cancer cell by inducing apoptosis, *Saudi Journal of Biological Sciences*, (2019). **IF= 4.0**

[12] **H. Dianat-Moghadam**, L. Teimoori-Toolabi, Implications of Fibroblast Growth Factors (FGFs) in Cancer: From Prognostic to Therapeutic Applications, *Current drug targets*, 20 (2019) 852-870. **IF= 3.4**

[13] **H. Dianat-Moghadam**, M. Rokni, F. Marofi, Y. Panahi, M. Yousefi, Natural killer cell-based immunotherapy: From transplantation toward targeting cancer stem cells, *Journal of cellular physiology*, 234 (2019) 259-273. **IF= 6.3**

[14] **H. Dianat-Moghadam**, M. Heidarifard, R. Jahanban-Esfahlan, Y. Panahi, H. Hamishehkar, F. Pouremamali, R. Rahbarghazi, M. Nouri, Cancer stem cells-emanated therapy resistance: implications for liposomal drug delivery systems, *Journal of controlled release*, (2018). **IF= 9.7**

[15] M. Keshavarz, **H. Dianat-Moghadam**, V.H. Sofiani, M. Karimzadeh, M. Zargar, M. Moghoofei, H. Biglari, S. Ghorbani, J.S. Nahand, H. Mirzaei, MiRNA-based strategy for modulation of influenza A virus infection, *Epigenomics*, 10 (2018) 829-844. **IF= 4.7**

[16] A. Rostami, S.A. Moosavi, **H. Dianat-Moghadam**, E.R. Bolookat, Micronuclei Assessment of the radioprotective effects of melatonin and vitamin c in human lymphocytes, *Cell Journal (Yakhteh)*, 18 (2016) 46. **IF= 2.4**

- [17] B. Sadeghi kalani, Gh. R. Irajian, A. Bahador, A. Pournajaf, **H. Dianat-Moghadam**, M. Neghabi, R. S. Jelodar, Typing and Evaluation of the Genetic Relatedness of Listeria monocytogenes Strains Isolated from Food Samples by the Multiple-Locus Variable Number Tandem Repeat Analysis (MLVA), Iranian Journal of Medical Microbiology, 8 (2015) 13-19.
- [18] M. Keshavarz, S.M. Miri, E. Behboudi, Y. Arjeini, **H. Dianat-Moghadam**, A. Ghaemi, Oncolytic virus delivery modulated immune responses toward cancer therapy: Challenges and perspectives, International Immunopharmacology, 108 (2022) 108882. **IF=5.7**
- [19] M. Shahgolzari, **H. Dianat-Moghadam**, A. Yavari, S.N. Fiering, K. Hefferon, Multifunctional Plant Virus Nanoparticles for Targeting Breast Cancer Tumors, Vaccines, 10 (2022) 1431. **IF=4.9**
- [20] A. Alizadegan, M. Akbarzadeh, M.S. Soltani-Zangbar, R. Sambrani, K. Hamdi, A. Ghasemzadeh, P. Hakimi, B. Vahabzadeh, **H. Dianat-Moghadam**, A. Mehdizadeh, Isolation of cfDNA from spent culture media and its association with implantation rate and maternal immunomodulation, BMC research notes, 15 (2022) 1-7. **IF=0.9**
- [21] **Dianat-Moghadam, H.\***, Mahari, A., Salahlou, R. et al. Immune evader cancer stem cells direct the perspective approaches to cancer immunotherapy. Stem Cell Res Ther 13, 150 (2022). <https://doi.org/10.1186/s13287-022-02829-9>. **IF= 8**
- [22] Sadeghzadeh, H., Mehdipour, A., **Dianat-Moghadam, H.** et al. PCL/Col I-based magnetic nanocomposite scaffold provides an osteoinductive environment for ADSCs in osteogenic cues-free media conditions. Stem Cell Res Ther 13, 143 (2022). <https://doi.org/10.1186/s13287-022-02816-0>. **IF=8**
- [23] A. Alizadegan, **H. Dianat-Moghadam**, N. Shadman, M. Nouri, K. Hamdi, A. Ghasemzadeh, M. Akbarzadeh, P. Sarvarian, A. Mehdizadeh, S. Dolati, Application of cell free DNA in ART, Placenta, (2022). **IF= 3.287**
- [24] **Dianat-Moghadam H\***, Sharifi M, Salehi R, Keshavarz M, Shahgolzari M, Amoozgar Z. Engaging stemness improves cancer immunotherapy. Cancer Letters. 2022;216007. **IF: 9.7**

[25] Yadi, M., Azizi, M., **Dianat-Moghadam, H.**\*. et al. Antibacterial activity of green gold and silver nanoparticles using ginger root extract. *Bioprocess Biosyst Eng* 45, 1905–1917 (2022). <https://doi.org/10.1007/s00449-022-02780-2>. **IF= 3.4**

[26]. Beni, F.A., Kazemi, M., **Dianat-Moghadam, H.** et al. MicroRNAs regulating Wnt signaling pathway in colorectal cancer: biological implications and clinical potentials. *Funct Integr Genomics* 22, 1073–1088 (2022). <https://doi.org/10.1007/s10142-022-00908-x>. **IF= 3.6**

[27] **Dianat-Moghadam, H.**\*, Abbasspour-Ravasjani, S., Hamishehkar, H. et al. LXR inhibitor SR9243-loaded immunoliposomes modulate lipid metabolism and stemness in colorectal cancer cells. *Med Oncol* 40, 156 (2023). <https://doi.org/10.1007/s12032-023-02027-4>. **IF= 3.6**

[28] S. Karkon-Shayan, H. Aliashrafzadeh, **H. Dianat-Moghadam**, N. Rastegar-Pouyani, M. Majidi, M. Zarei, et al. Resveratrol as an antitumor agent for glioblastoma multiforme: Targeting resistance and promoting apoptotic cell deaths. *Acta Histochemica* 2023 Vol. 125 Issue 6.152058. **IF= 2.5**

[29] H. Sadeghzadeh, **H. Dianat-Moghadam**, D. Bakhshayesh, A. Rahmani, D. Mohammadnejad and A. Mehdipour A review on the effect of nanocomposite scaffolds reinforced with magnetic nanoparticles in osteogenesis and healing of bone injuries. *Stem Cell Research & Therapy* 2023 Vol. 14 (1).1-17. **IF=7.5**

[30] **H. Dianat-Moghadam** \*, R. Nedaeinia, M. Keshavarz, M. Azizi, M. Kazemi and R. Salehi. Immunotherapies Targeting Tumor Vasculature: Challenges and Opportunities. *Frontiers in Immunology* Vol. 14 Pages 1226360. **IF=7.3**

[30] Mahmood Fadaie; **Hassan Dianat-Moghadam**; Elham Ghafouri; Shamsi Naderi; Mohammad Hossein Darvishali; Mahsa Ghovvati; Hossein Khanahmad; Maryam Boshtam; Pooyan Makvandi Unraveling the potential of M13 phages in biomedicine: Advancing drug nanodelivery and gene therapy. *Environmental Research*. 0013-9351. 2023-12 DOI: 10.1016/j.envres.2023.117132. **IF=8.3**

## INTERNATIONAL CONGRESS

- **H. Dianat-Moghadam**, M. Khalili, F. S. Mahdaviani, Future directions for applying Hematopoietic Stem Cell in transfusion Medicine, 11<sup>th</sup> International Congress of Laboratory and Clinic, Tehran, Iran (16/01/2019)
- M. Khalili, **H. Dianat-Moghadam**, F. S. Mahdaviani, M. R. Soleyman, Application of CRISPR Cas9 gene editing technology to increase RBC compatibility for blood transfusion, 11<sup>th</sup> International Congress of Laboratory and Clinic, Tehran, Iran (17/01/2019)
- Mostafa Khalili, Shima Abbasi, **Hassan Dianat-Moghadam**, Fateme Sadat Mahdaviani. The Effects of Platelet-rich Plasma on Cell Proliferation, Adhesion and Spreading of Human Adipose-derived Stem Cells and Preserves Their Stemness. 13th International Congress of Laboratory and Clinic, Tehran, Iran (February 2022).

## THE MAJOR RESEARCH AREAS

- Isolation, identification and targeting Cancer Stem Cells (CSCs)
- Implication of Stem Cells (SCs) in Regenerative Medicine
- Applications of Bionanotechnology in Vaccine Development

## BOOKS

- Mehdi Azizi, Hadi Kokabi, **Hassan Dianat-Moghadam**, Mohammad Mehrmohammadi Targeted Cancer Imaging, Design and Synthesis of Nanoplatforms based on Tumor Biology. (Elsevier, Text book: eBook ISBN: 9780128245149 Paperback ISBN: 9780128245132).
- **H. Dianat-Moghadam**, M. Khalili, S. Farajnia, Principles & Applications of CRISPR Genome Editing Technology (2019/3/14) (Published by Tabriz University of Medical Sciences), <http://www.ketab.ir/bookview.aspx?bookid=2336970>
- H. Kahroba, N. Pahlavan, **H. Dianat-Moghadam**, F. Pouremamali, N. Samadi. Biomarkers in Cancer Screening and Early Detection (Translation) (Published by Tabriz University of Medical Sciences), <http://www.ketab.ir/BookList.aspx?Type=Authorid&Code=555572>.
- M. Fadaei, **H. Dianat-Moghadam**, H. Khanahmad, Vaccines (Under evaluation by Isfahan University of Medical Sciences)

## **LABORATORY TECHNICAL SKILLS**

Cloning; DNA/RNA/Protein extraction; 2D and 3D cells culture; MACS; MTT; ELISA; Western Blotting; Real-Time PCR; PCR, Flow cytometry; Tumor Invasion/Migration assay; Liposome formulation, MLVA; Handling and injection in mice model.

## **COMPUTER SKILLS**

- Graph Pad Prism
- End Note (intermediate)
- Microsoft Office (Word, Power point, Excel)

## **HONORS and AWARDS**

Honorary Distinguished Scientific Student According to Section “K”-based assessment, Educational, Scientific and Welfare Institutions Special for Brilliant National Talents.

## **LANGUAGES**

- English: Proficient

## **REFREE**

- Prof. Mohammad Nouri (Ph. D Supervisor), Head of Dept. of Reproductive Biology, Department of Biochemistry and Clinical laboratories, Stem Cells Research center, Tabriz University of Medical Sciences, Email: nourimd@yahoo.com
- Dr. Reza Rahbarghazi, Assistant professor (Ph. D Supervisor), Stem Cells Research center, Tabriz University of Medical Sciences, Email: rezarahbardvm@gmail.com
- Prof. Hammed Hamishehkar, (Ph. D Adviser), Research Professor of Pharmaceutics, Drug Applied Research Center, Tabriz University of Medical Sciences, Email: hamishehkar.hamed@gmail.com
- Dr. Zohreh Amoozgar, (Ph. D Adviser), Harvard Medical School at Massachusetts General Hospital, Boston, Massachusetts, United States, Email: ZAMOOZGAR@mgh.harvard.edu
- Dr. Babak Negahdari, Department of Medical Biotechnology, School of Advanced Technologies in Medicine, Tehran University of Medical Sciences, Tehran, Iran. Email: negahdari\_md@yahoo.com
- Dr. Ladan Teimoori-Toolabi (M.Sc. Supervisor), Molecular Medicine Department, Pasteur Institute of Iran, Email: lteimoori@pasteur.ac.ir