

**In the name of God**



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**Assistant Prof.**

**PhD. of Biomedicine**

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**Date of Birth:** 1980

**Marital Status:** Married

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## **Education**

**B. Sc:** 2004, Biology, Faculty of Sciences, Razi University, Kermanshah, Iran

**M. Sc:** 2008, Cell and Molecular Biology, School of Medical Sciences, Shahid Madani University, Tabriz, Iran & National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran

**Ph. D:** 2017, Biomedicine, Medical Biology Research Center, Kermanshah University of Medical Sciences, Iran

## **Research Interest**

- Tumor and Angiogenesis
- Stem Cell
- Molecular Biology
- Proteomics
- Immunology
- Pharmacognosy

## **Honors and Awards**

- Distinguished Researcher in Kermanshah University of Medical Sciences (2010)
- Distinguished Researcher in Kermanshah University of Medical Sciences (2011)
- Distinguished Researcher Student in Kermanshah University of Medical Sciences (2012)
- Distinguished Researcher in Kermanshah University of Medical Sciences (2014)
- Distinguished Researcher in Kermanshah University of Medical Sciences (2017)
- Brilliant-talent Student in Kermanshah University of Medical Sciences

**h-index (scopus): 7**

## **Book:**

Angiogenesis (*In press*)

## **Publications:**

1. Anti-angiogenesis effect of  $\beta$ -D-mannuronic acid (M2000) as a novel NSAID with immunosuppressive properties under experimental model  
Mohsen Rastegar Pouyani, Ali Mostafaie, Kamran Mansouri, Shahabeddin Mortazavi Jahromi, **Hamid Reza Mohammadi Motlagh**, Abbas Mirshafiey  
*Clinical and Experimental Pharmacology and Physiology*, In press.
2. 2-Methylpyridine-1-ium-1-sulfonate from *Allium hirtifolium*; an anti-angiogenic compound which inhibits growth of MCF-7 and MDA-MB-231 cells through cell cycle arrest and apoptosis induction  
**Hamid-Reza Mohammadi-Motlagh**, Yalda Shokohinia, Mahdi Mojarab, Hassan Rasouli, Ali Mostafaie  
*Biomedicine & Pharmacotherapy*, 2017; 93: 117-129.
3. *In vitro* inhibition of angiogenesis by heat and low pH stable hydroalcoholic extract of Peganum harmala seeds via inhibition of cell proliferation and suppression of VEGF secretion  
Niloofer Yavari, Farnoosh Emamian, Reza Yarani, **Hamid-Reza Mohammadi-Motlagh**, Kamran Mansouri, Ali Mostafaie  
*Pharmaceutical Biology*, 2015; 53(6): 855-61.
4. A highly pure sub-fraction of shallot extract with potent *in vitro* anti-angiogenic activity  
Shima Famil Samavati, **Hamid-Reza Mohammadi-Motlagh**\*(as Corresponding author), Ali Mostafaie  
*International Journal of Molecular and Cellular Medicine*, 2014; 3(4):1-9.
5. Comparative evaluation of cytotoxic and apoptogenic effects of the coumarins isolated from the roots of Prangos ferulacea (L.) Lindl. on human cancer cell lines: Osthole induces apoptosis in p53-deficient H1299 cells  
Yalda Shokoohinia, Leila Hosseinzadeh, Maryam Alipoor, Ali Mostafaie, **Hamid-Reza Mohammadi-Motlagh**  
*Advances in Pharmacological Sciences*, 2014. doi:10.1155/2014/847574
6. Osthole attenuates doxorubicin-induced apoptosis in PC12 cells through inhibition of mitochondrial dysfunction and ROS production  
Yalda Shokoohinia, Leila Hosseinzadeh, Maryam Moieni-Arya, Ali Mostafaie, **Hamid-Reza Mohammadi-Motlagh**  
*BioMed Research International*, 2014. doi:10.1155/2014/156848.
7. Low concentrations of flavonoid-rich fraction of shallot extract induce delayed-type hypersensitivity and TH1 cytokine IFN $\gamma$  expression in BALB/c mice  
Leila Farhadi, **Hamid-Reza Mohammadi-Motlagh**, Parivash Seyfi, Ali Mostafaie  
*International Journal of Molecular and Cellular Medicine*, 2014; 3(9): 16.25.
8. *In vitro* evaluation of Zn-Norfloxacin complex as a potent cytotoxic and antibacterial agent, proposed model for DNA binding  
Farhad Ahmadi, Mohamadreza Saberkeri, Ramin Abiri, **Hamid-Reza Mohammadi Motlagh**, Hamidreza Saberkeri  
*Applied Biochemistry and Biotechnology*, 2013; 170 (4): 988-1009.
9. New procedure for epidermal cell isolation using kiwi fruit actinidin, and improved culture of melanocytes in the presence of leukaemia inhibitory factor and forskolin  
Reza Yarani, Kamran Mansouri, **Hamid Reza Mohammadi-Motlagh**, Mitra Bakhtiari and Ali Mostafaie  
*Cell Proliferation*, 2013; 46(3): 348-55.

10. [In vitro inhibition of angiogenesis by hydroalcoholic extract of oak \(\*Quercus infectoria\*\) acorn shell via suppressing VEGF, MMP-2, and MMP-9 secretion](#)  
Reza Yarani, Kamran Mansouri, **Hamid Reza Mohammadi-Motlagh**, Azadeh Mahnam, Mohammad Sajjad Emami Aleagha  
*Pharmaceutical Biology*, 2013; 51(3): 361-8
11. [Apoptotic and cytotoxicity effects of All Trans Retinoic Acid \(ATRA\) in cultured human uterine myoma](#)  
Taravat Fakheri, Homa Badri, Ali Mostafaie, **Hamid Reza Mohammadi-Motlagh**, Mansour Rezaei  
*Behbood Journal*, 2013; 17(6):351-356
12. [Chemical composition and anti-cancer activity of the essential oil from \*Achillea wilhelmsii\* K. Koch.](#)  
Mohammad-Bagher Majnooni, Kamran Mansouri, Mohammad-Bagher Gholivand, Ali Mostafaie, **Hamid-Reza Mohammadi-Motlagh**, Mir-Mehdi Abolghasemi, Marzieh Piriyaee, Nazanin-Sadat Afanzade  
*African Journal of Biotechnolog*, 2012; 11(2): 498-503.
13. [In vitro inhibition of angiogenesis by hydroalcoholic extract of oak \(\*Quercus infectoria\*\) acorn shell via suppressing VEGF, MMP-2, and MMP-9 secretion](#)  
Reza Yarani, Kamran Mansouri, **Hamid Reza Mohammadi-Motlagh**, Azadeh Mahnam, Mohammad Sajjad Emami Aleagha  
*Pharmaceutical Biology*, 2012; 51(3):361-368
14. [Study of the mechanisms and causes related to angiogenesis: Review Article](#)  
Kamran Mansouri , Parivash Seifi<sup>2</sup>, Ali Mostafaie, **Hamid Reza Mohammadi-Motlagh**  
*Scientific Journal of Kurdistan\_University Medical Sciences*, 2012; 17(2): 96-107
15. [The effect of endurance training on the expression of the sodium-hydrogen exchanger 1 \(NHE1\) and sodium bicarbonate cotransporter 1 \(NBC1\) genes in rat heart muscle](#)  
Amirabbas Monazami, Hamid Rajabi, Ali Mostafai, Kobra Omidfar, Vahid Shahbazi, **Hamid Reza Mohammadi-Motlagh**  
*Iranian Journal of Diabetes and Metabolism*, 2012; 47(2):142-147.
16. [Tranilast could has potential therapeutic value in the treatment of psoriasis](#)  
Kamran Mansouri, **Hamid Reza Mohammadi Motlagh**, Maryam Keshavarz  
*Medical Hypotheses*, 2011; 76 (2): 217-219.
17. [Diagnostic value of chemical shift artifact in distinguishing benign lymphadenopathy](#)  
Nazanin Farshchian, Saghar Tamari, Negin Farshchian, Hamid Madani, Mansour Rezaie, **Hamid-Reza Mohammadi-Motlagh\*\* (as Corresponding author)**  
*European Journal of Radiology*, 2011; 80: 594–597.
18. [Anti-cancer and anti-inflammatory activities of shallot \(\*Allium ascalonicum\*\) extract](#)  
**Hamid-Reza Mohammadi-Motlagh**, Ali Mostafaie, Kamran Mansouri  
*Archives of Medical Science*, 2011; 7, (1): 1-7
19. [Anti-angiogenic/proliferative behavior of a “4-aryl-4H-chromene” on blood vessel’s endothelial cells: A possible evidence on dual “anti-tumor” activity](#)  
Kamran Mansouri, Reza Khodarahmi, Alireza Foroumadi, Ali Mostafaie, **Hamidreza Mohammadi Motlagh**  
*Medicinal Chemistry Research*, 2011; 20: 920–929.
20. [Anti-angiogenic activity of \*Ficus carica\* Latex extract on human umbilical vein endothelial cells](#)

- Ali Mostafaie, Kamran Mansouri, Amir-Hossein Norooznezhad, **Hamid-Reza Mohammadi-Motlagh**  
*Cell Journal (Yakhteh)*, 2011; 12 (4): 525-528.
21. [Anti tumor activity of Salvia officinalis is due to its anti-angiogenic, anti-migratory and anti-proliferative effects](#)  
Maryam Keshavarz, Ali Bidmeshkipour, Ali Mostafaie, Kamran Mansouri, **Hamid-Reza Mohammadi-Motlagh**  
*Cell Journal (Yakhteh)*, 2011; 12 (4): 477-482.
  22. [Angiogenesis and tumor: Review Article](#)  
Kamran Mansouri, Ali Mostafaie, Ali Mostafaie, **Hamid-Reza Mohammadi-Motlagh**  
*Behbood Journal*, 2011; 11(4):374-381.
  23. [In vitro and ex vivo anti-angiogenic activity of Salvia officinalis](#)  
Maryam Keshavarz, Ali Mostafaie, Kamran Mansouri, Ali Bidmeshkipour, **Hamid Reza Mohammadi Motlagh**, Shahram Parvaneh  
*Phytotherapy Research*, 2010; 24: 1526–1531.
  24. [In vitro and in vivo anti-angiogenesis effect of shallot \(Allium ascalonicum\): A heat-stable and flavonoid-rich fraction of shallot extract potently inhibits angiogenesis](#)  
Seyfi Parivash, Mostafaie Ali, Mansouri Kamran, Arshadi Delnia, **Mohammadi-Motlagh Hamid-Reza**, Kiani Amir  
*Toxicology in Vitro*, 2010; 24: 1655–1661.
  25. [Plants as useful agents for angiogenesis and tumor growth prevention: Review Article](#)  
**Mohammadi-Motlagh Hamid-Reza**, Kamran Mansouri, Ali Mostafaie  
*Physiology and Pharmacology*, 2010; 14(3):297-312.
  26. [Angiogenesis and the models to study angiogenesis: Review Article](#)  
Kamran Mansouri, Ali Mostafaie, **Hamid-Reza Mohammadi-Motlagh**  
*Cell Journal*, 2010; 14(4):305-315.
  27. [Corneal Neovascularization: Review Article](#)  
Kamran Mansouri , Ali Mostafaie, **Hamid Reza Mohammadi-Motlagh**, Yadollah Shakiba  
*Scientific Journal of Kurdistan University of Medical Sciences*, 2010; 15(1): 87-95.
  28. [Anti-angiogenic effect of aqueous extract of shallot \(Allium ascalonicum\) bulbs in rat aorta ring model](#)  
**Hamid-Reza Mohammadi-Motlagh**, Kamran Mansouri, Yadollah Shakiba, Maryam Keshavarz, Reza Khodarahmi, Abas Siami, Ali Mostafaie  
*Cell Journal*, 2009; 2(42): 190-195.
  29. [Inhibition of corneal neovascularization with propolis extract](#)  
Maryam Keshavarz, Ali Mostafaie, Kamran Mansouri, Yadollah Shakiba, **Hamid-Reza Mohammadi-Motlagh**  
*Archives of Medical Research*, 2009; 40(1):59-61.
  30. [Human coagulated plasma as a natural and low cost matrix for in vitro angiogenesis](#)  
Mansouri Kamran, Mostafaie Ali, Mirshahi Manoucher, **Mohammadi Motlagh Hamid-Reza**, Maleki Ali, Keshavarz Maryam  
*Iranian Biomedical Journal*, 2009; 13 (3): 179-83.

## **Lecturer of Workshop**

- Cell culture (2008, 2010)
- Angiogenesis (2009, 2011)
- Real-Time PCR (2015, 2018)

## **Research Projects**

- Study of differentiation of Skin-Derived precursor (SKP) to Insulin Producing cells (IPC) in vitro and proteome analysis of cell during differentiation
- Study of differentiation of stem cells from adult rat olfactory epithelium to ear hairy cells
- Study of endothelial differentiation potential of the adult stem cells isolated from olfactory epithelium of adult rat
- Study of proliferation and differentiation rate in human Skin-Derived Precursors and differentiate them to glial cells in vitro and proteome comparison in precursor and differentiated cells
- Study of proteins analyses of human ovarian cysts fluid & cystic tumors using two-dimensional gel electrophoresis
- Study of synergic effect of Tamoxifen and Tranilast on cell proliferation, metastasis and angiogenic factors of human breast cancer cells
- Study of Raloxifene & GnRH-a Effects on VEGF expression in cultured human uterin leiomyoma cells
- Study of effect of the shallot extract on cellular immune responses in BALB/c mice (**as Advisor**)
- Production of soybean Bowman-Birk trypsin inhibitor (BBI)-Genistein conjugate and comparison of anti-inflammatory potential of the conjugate and mixture of BBI and Genistein in mouse inflammation model (**as Advisor**)
- Study of proliferation and differentiation rates of human skin-derived precursor to pancreas beta cells
- Study of antibacterial and cytotoxicity and in vitro interaction of zinc-Norfloxacin, cobalt-Norfloxacin and palladium- Norfloxacin complexes with DNA (**as Supervisor**)
- Comparison of apoptosis resulted from 9-nitrocamptothecin and nanoparticles containing 9-nitrocamptothecin in Human ovarian carcinoma cells A2780 (**as Supervisor**)
- Study of trypsin inhibitor bowman birk of soybean on the Gastric adenocarcinoma in vitro
- Study of cytotoxic effect of hydroalcoholic extract of shallot bulbs in colon cancer cell lines; Caco2 and sw837, and investigation the role of its oral consumption in colon cancer prevention in mouse model

## Congresses

- Hydroalcoholic extract of oak (*quercus infectoria*) inhibits in vitro angiogenesis. **Oral Presented at 11<sup>th</sup> International Congress of Immunology and Allergy**. April 2012, Tehran, Iran.
- Differentiation of Inner Hair Cells from Olfactory Stem Cells of Rat Olfactory Epithelium, *Royan International Twin Congress, 7<sup>th</sup> Congress on Stem cell Biology & Technology*, September 2011, Tehran, Iran.
- Differentiated Insulin-Producing Cells from Skin-Derived Stem Cells, Functional or Non Functional *Royan International Twin Congress, 7<sup>th</sup> Congress on Stem cell Biology & Technology*, September 2011, Tehran, Iran.
- Inhibition of Angiogenesis, a Novel Effect of Ficus Carica Latex Extract. Presented at *The 1<sup>st</sup> International Student Congress on Cell and Molecular Medicine*, February 2011, Shiraz, Iran.
- Trypsin Inhibitor Purified from *Cucumis Melo* Seeds: A Possible Therapeutic Perspective for Tumor and Angiogenesis Related Disease. Presented at *The 1<sup>st</sup> International Student Congress on Cell and Molecular Medicine*, February 2011, Shiraz, Iran.
- Anti-angiogenic effect of *Artemia vulgaris* on Human bone marrow endothelial cells. Presented at *19<sup>th</sup> Asia Pacific Cancer Conference*, Nov 15-17, 2007, Tehran, Iran.
- *In vitro* cytotoxicity evaluation of 9-nitrocamptothecin-loaded PLGA-PEG nanoparticles with different PLGA/PEG ratios. Presented at *16<sup>th</sup> Iranian Pharmacy Students Seminar*. October 2011, Tehran, Iran.
- Plants as the effective compounds on angiogenesis. Presented at *The 1<sup>st</sup> Iranian Congress of Endothelium*. May 2009, Isfahan, Iran.
- Potential uses of monoclonal antibodies in angiogenesis inhibition. Presented at *The 1<sup>st</sup> Iranian Congress of Endothelium*. May 2009, Isfahan, Iran.
- Anti-cancer and anti-inflammatory activities of shallot (*Allium ascalonicum*) extract. Presented at *8<sup>th</sup> Iranian Congress of Haematology & Oncology*. September 2008, Uromieh, Iran.
- Hydrolysis of cow milk casein using ficin enzyme from fig for production of the hydrolysed milk for allergic infants. Presented at *9<sup>th</sup> Iranian Congress of Immunology & Allergy*. June 2008, Tehran, Iran.
- Heat stable extract of shallot that inhibits angiogenesis in human bone marrow endothelial cells (HBMEC) and chorioallantoic membrane (CAM) models. **Oral Presented at 18<sup>th</sup> Iranian Congress of Physiology & Pharmacology**. August 2007, Mashhad, Iran.
- Anti-angiogenic effect of garden sage (*salvia*) extract on human bone marrow endothelial cells (HBMEC) and chorioallantoic membrane (CAM). Presented at *18<sup>th</sup> Iranian Congress of Physiology & Pharmacology*. August 2007, Mashhad, Iran.