

# Curriculum Vitae

## Personal Information:

- ❖ First name and last name: Mona Salimi
- ❖ Sex: Female
- ❖ Nationality: Iranian
- ❖ Place of birth: Tehran, Iran
- ❖ Language: Persian, English, French
- ❖ Mailing Address: Physiology & Pharmacology Department, Pasteur institute of Iran, Tehran, Iran
- ❖ Tel-fax: 98 21 66968854
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## Position:

- ❖ Faculty Member of Pasteur Institute of Iran (Assistant Professor, 2006-2015).
- ❖ Faculty Member of Pasteur Institute of Iran (Associate Professor, 2016).
- ❖ Head of Parental Solution Department, Research & Production Complex, Pasteur Institute of Iran (2010-2011).

## Education:

- ❖ High school Diploma (Experimental Science), ErshadHigh School, Tehran, Iran(1992).
- ❖ Pharm.D. Faculty of Pharmacy, TehranUniversity of Medical Sciences, Tehran, Iran, (1993-1998).
- ❖ Ph.D. Faculty of Pharmacy, TehranUniversity of Medical Sciences (1999-2005).
- ❖ Faculty member in Pasteur Institute (2006).

## **Honor and Awards:**

- ❖ **Top student in board exam in Ph.D. (2001).**
- ❖ **As one of the 3 top students in Pharm.D. (1998).**
- ❖ **Awarded a scholarship by the Ministry of Health and Medical Education (2003).**

## **Occupations:**

- ❖ **Teaching organic chemistry (2000-2003), practical analytical chemistry (2001), practical organic chemistry in (1999) and general chemistry in (2003), to undergraduate students of Faculty of Pharmacy, Tehran University of Medical Sciences.**
- ❖ **Scholarship period in University of Alberta, Edmonton, Canada (Jun 2003-February 2004).**
- ❖ **Pharmacist in Makhsoos Pharmacy, Tehran, Iran (2005).**
- ❖ **Thesis supervision and co-supervision (MSc, Pharm.D. and Ph.D. students since 2006).**
- ❖ **Member of the Human Proteome Organisation (HUPO)(2009).**
- ❖ **Member of Iranian Pharmaceutical Sciences.**
- ❖ **Teaching instrumental analysis, protein chemistry, pharmacology and molecular biology courses to Ph.D. students of medical and pharmaceutical biotechnology of Pasteur Institute of Iran since 2008.**
- ❖ **Head of Parenteral Solution Department of Pasteur Institute of Iran (2010-2011).**
- ❖ **Teaching instrumental analysis and biotechnology courses as well as cytotoxicity evaluation methods to MSc. students of Pharmaceutical Branch of Islamic Azad University, undergraduate and Ph.D. students of Faculty of Pharmacy, Tehran University of Medical Sciences since 2012.**
- ❖ **Research council member of Ischemic Disorder Research Center of Golestan University of Medical Sciences (2015).**
- ❖ **Editorial board member of Molecular Pathology Journal since 2015.**

## **Thesis & Dissertation:**

- ❖ Extraction, purification and isolation of alkaloids from the *Heliotropium Dissitiflorum* (Pharm.D. Thesis).
- ❖ Design, Synthesis and Pharmacological evaluations of 4,5-diaryl imidazoles as selective COX-2 inhibitors (Ph.D. Dissertation).

## **Professional Skills:**

- ❖ Isolation and identification of natural compounds by different methods of chromatography.
- ❖ Identification of compounds by using IR, <sup>1</sup>H-NMR, <sup>13</sup>C-NMR & Mass spectra
- ❖ Synthesis of pharmaceutical compounds.
- ❖ Analytical HPLC.
- ❖ Docking method in drug design.
- ❖ Statistical analysis (SPSS program).
- ❖ Proteomics and its related software (2-DE, peptide mapping, western blot and cell culture)
- ❖ MTT assay and related cytotoxicity methods
- ❖ DNA Cleavage and plasmid extraction
- ❖ Flowcytometry (Annexin-PI and Cell cycle analysis)
- ❖ Invasion and migration assay
- ❖ Set up of co-culture system
- ❖ *In vivo* model of cancer
- ❖ *In vivo* model of wound
- ❖ ROS assay
- ❖ Mitochondrial membrane potential assay

## **Projects:**

- ❖ **Study of protein expression profile in an *in vitro* inflammation model treated with selective cyclooxygenase-2 inhibitors (Pasteur Institute of Iran, 2007-2009).**
- ❖ **Effect of nicotine on ERK, VEGF, COX-2 and PGE2 levels in oral squamous cell carcinoma in order to evaluate the role of celecoxib as a selective COX-2 inhibitor in preventing of oral cancer (Pasteur Institute of Iran, 2009-2011).**
- ❖ **Developing of new method for determination of Thiomersal in Hepatitis B vaccine produced by Pasteur Institute of Iran (Research & Production Complex of Pasteur Institute of Iran).**
- ❖ **Evaluation of some COX-2 inhibitor derivatives in order to find lead compound with anticancer activity (Tehran University of Medical Sciences, 2011-2012).**
- ❖ **Cytotoxicity study of some hydrazone derivatives ( Faculty of Pharmacy, Azad University of Medical Sciences).**
- ❖ **Extraction and Purification of trehalose as an vaccines' and recombinants' stabilizer from plant.**
- ❖ **Synthesis and purification of Riluzole in pilot scale.**
- ❖ **Evaluation the reasons of formation of particles in sodium bicarbonate solution (7.5%) produced by Pasteur Institute.**
- ❖ **Evaluation of apoptotic effects of anticancer constituents from leaves of *Juglans regia* in breast cancer cell line (Pasteur Institute, 2011-2013).**
- ❖ **Evaluation of antioxidant and antimelanogenic activity of five *Phlomis* species (Pharmaceutical Research Center, Tehran University of Medical Sciences).**
- ❖ **Evaluation of apoptotic induced by novel selective COX-2 inhibitors in breast cancer cell line (Pasteur Institute of Iran, 2012-2013).**
- ❖ **Effect of human bone marrow derived mesenchymal stem cells on the invasive characteristics of breast cancer cells and evaluation of two COX-2 inhibitor derivatives in this interaction in an *in vitro* model (Pasteur Institute of Iran, 2014-2015).**
- ❖ **Evaluation of cytotoxic effects of fractions obtained from *Anthemis nobilis* on MCF-7 cell line (Ischemic Disorders Research Center, Golestan University of Medical Sciences, Since 2015).**

- ❖ Finding markers involved in metastasis induced by Epithelial-to-Mesenchymal transition process and evaluation of Celecoxib and Etanercept in this interaction (Cancer Research Network, Since 2015).
- ❖ Cellular proteomic analysis in order to explore novel therapeutic targets in cancer with application for other diseases ( Pasteur Institute of Iran, 2016).

### **Congress:**

- ❖ Mona Salimi, Khatereh abdi, Hirsra Mostafapour, Hassan Hadadzadeh, Amir Amanzadeh. Apoptosis induced by two copper(II)-polypyridil complexes in breast cancer. Euro Med lab, 21-25 Jun, Paris, 2015.
- ❖ Misha Salimi, Hirsra Mostafapour, Amir Amanzadeh, Noushin Rastkari, Mona Salimi. Anticancer and apoptotic effects of ethylacetate fraction obtained from *Anthemis nobilis*.Euro Med lab, 21-25 Jun, Paris, 2015.
- ❖ Mona Salimi, Mohsen Amini, Amir Amanzadeh, Mahnaz Norouzi, Shaghayegh Norouzi,Ahoo Afsharinasab, Farnaz Barneh, Khadijeh Moradi, Saeed Irian. New COX-2 inhibitor derivatives as potent anti-cancer agents. Internation Physiology and Pharmacology congress, 7-11 Sept 2015.
- ❖ Mona Salimi, Shaghayegh Norouzi, Mahnaz Norouzi, Mohsen amini, Amir Amanzadeh. COX-2 independent induction of apoptosis by two synthetic COX-2 inhibitors in breast cancer cell line. European associated cancer research 23, 5-8 July, 2014.
- ❖ Misha Salimi, Nastaran Gheisarzadeh, Kayhan Azadmnaesh, Noushin Rastkari, Mona Salimi. Antiproliferative effects of different fractions obtained from *Anthemis nobilis* leaves on human oral cancer cell. European associated cancer research 23, 5-8 July, 2014.
- ❖ Mona Salimi, Mahnaz Norouzi, Kayhan azadmanesh, Amir Amanzadeh, Hassan sanati, Hirsra Mostafapour, Saeed Irian, Mohsen Amini. COX-2 inhibitors prevent proliferation of breast cancer cells by inducing apoptosis. 5<sup>th</sup> BBBB international congress, 26-28 Sept.Athen, 2013.
- ❖ Shaghayegh Norouzi, Mahnaz Norouzi, Saeed Irian, Hirsra Mostafapour Kandelous,Mohamad Nabiuni , Mona Salimi. Evaluation of apoptosis induced by COX-2 inhibitors in leukemia and breast cancer cells. 21 th International Iranian Congress of Physiology and Pharmacology, 23-27 Aug.Tabriz, 2013.
- ❖ Nooshin Rastkari, Reza Ahmadkhaniha, Mohammad reza Yunesian, Mona Salimi. Sensitive HS-SPME-GC-MS determination of haloacetic acids in human urine using single-walled carbon nanotubes as adsorbent. 29<sup>th</sup> International Symposium on chromatography,9-13 Sept., Poland, 2012.
- ❖ Mahnaz Noroozi, Hirsra Mostafapour, Amir Aamnzadeh, Keyhan Azadmanesh, Saeed Irian, Mona salimi. DNA cleavage and anti-proliferative activity of COX-2 inhibitor derivatives on human breast adenocarcinoma and

chronic myeloid leukemia cells. *Research in Pharmaceutical Sciences, International of Pharmaceutical Science, Isfahan, 2012, 7(5).*

- ❖ Hirsā Mostafapour, Mahnaz Norouzi, Zahra Shahhosseini, Soheil Ghasemi, Mona Salimi. Evaluation of oxidative DNA cleavage of copper (II) complexes as chemotherapeutic agents. *Research in Pharmaceutical Sciences, International of Pharmaceutical Science, Isfahan, 2012, 7(5).*
- ❖ Mona Salimi, Masoumeh Esfahani, Narcis Habibzadeh, Hamid Reza Aslani, Amir Amanzadeh, Mohammad Hossein Ghahremani. Assessment of celecoxib in inhibition of nicotine-induced invasion of human oral squamous cancer cells. *Research in Pharmaceutical Sciences, International of Pharmaceutical Science, Isfahan, 2012, 7(5).*
- ❖ Khatereh Abdi, Hassan Hadadzadeh, Mona Salimi. Antitumor activity of a mononuclear copper(II) complex with polypyridyl ligands, [Cu(tpy)(dppz)]<sup>2+</sup>: DNA binding and *in vitro* cell cytotoxicity. *Research in Pharmaceutical Sciences, International of Pharmaceutical Science, Isfahan, 2012, 7(5).*
- ❖ Mona Salimi, Mohammad Hassan Ardestanian, Zahra Sepahdar, Soudabeh Saeednia, Ahmad Reza Gohari, Keyhan Azadmanesh, Amir Amanzadeh. Bioactivity guided isolation of anticancer constituents from leaves of Juglans regia, *Biomedical Papers, International of Anticancer Drugs, June 30-July 4, 2012, Olomouc, Czech.*
- ❖ Misha Salimi, Nastaran Gheisarzadeh, Amir Amanzadeh, Keyhan Azadmanesh, Noushin Rastkari, Mona Salimi. Cytotoxicity effects of Anthemis nobilis leaves extract in oral human cancer cell line. *Biomedical Papers, International of Anticancer Drugs, June 30-July 4, 2012, Olomouc, Czech.*
- ❖ Mona Salimi, Masoumeh Esfahani, Nooshin Rastkari, Bitā Sedaghati, Mohammad Hossein Ghahremani. Effect of celecoxib on P-ERK, COX-2, PGE2 and VEGF expression in oral cancer in presence and absence of nicotine. *Journal of Biotechnology, 150 S(2010) S1- S576.*
- ❖ Minoο Hamraz, Mona Salimi, Masoumeh Esfahani, Bitā Sedaghati, Hamid Reza Aslani, Azadeh Bazarchi. Nicotine effect on P-ERK, COX-2, PGE2 and VEGF expression in oral squamous cancer. *Journal of Biotechnology, 150 S(2010) S1- S576.*
- ❖ Noushin Rastkari, Nasrin Samadi, Mona Salimi, Dina Dalili, Reza Ahmadkhaniha. Cytotoxic effects, apoptosis induction and cell cycle alterations in HT29 cells and T47D cells treated with Prodigiosin purified from Serratia marcescens. *Journal of Biotechnology, 150 S(2010) S1- S576.*
- ❖ Noushin Rastkari, Nasrin Samadi, Mona Salimi, Reza Ahmadkhaniha. Antimicrobial and free radical- scavenging activity of Iranian Hyssopus

Officinalis which contain flavonoid pigments. *IPSC 2010, 12<sup>th</sup> Iranian Pharmaceutical Sciences Congress, 2-5 August 2010, Zanzan, IRAN.*

- ❖ *Mona Salimi*, Ahmad Majd, Zahra Sepahdar, Mohammad Hossein Hedayati, Mohammad Atyabi. Antiproliferative activity of Juglans regia leaf extracts on cancer cell lines. *IPSC 2010, 12<sup>th</sup> Iranian Pharmaceutical Sciences Congress, 2-5 August 2010, Zanzan, IRAN.*
- ❖ *Mona Salimi*, Faeghe Rezaee, Mohammad Hossein Ghahremani, Behrouz Vaziri. Proteomics Reveals Proteins in Celecoxib-Treated Macrophage Cells. *IPSC 2010, 12<sup>th</sup> Iranian Pharmaceutical Sciences Congress, 2-5 August 2010, Zanzan, IRAN.*
- ❖ *Mona Salimi*, Bita Sedaghati, Masoumeh Esfahani, Mohammad Hossein Hedayati. VEGF Expression Determination in Oral Squamous Cancer Cell Line (BHY) Stimulated by Nicotine in Presence and Absence of Celecoxib as Selective COX-2 Inhibitor. *IPSC 2010, 12<sup>th</sup> Iranian Pharmaceutical Sciences Congress, 2-5 August 2010, Zanzan, IRAN.*
- ❖ *Mona Salimi*, Faegheh Rezaee, Soudabeh Akbarzadeh, Mohammad Hossein Ghahremani, Behrouz Vaziri. Proteomic analysis of macrophages stimulated by lipopolysaccharide and treated with celecoxib as selective COX-2 inhibitor. *HUPO16 -22<sup>th</sup> August 2008, Amestrdam, Netherland.*
- ❖ *Mona Salimi*, Maryam Mardaneh, Mohammad Atyabi, Azim Akbarzadeh, Mohammad Reza Mehrabi, Ali Farhangi. High Performance liquid chromatography identification of Desferrioxamine B: produced by Streptomyces Pilosus. *11<sup>th</sup> Iranian Pharmaceutical Sciences Conference (Iranian Journal of Pharmaceutical Sciences 2008, 1(3), supplement 1), 18-21<sup>th</sup> August 2008, Kerman, Iran.*
- ❖ *Mona Salimi*, Nazanin Abdipour, Parisa Sarkheil. Extraction and purification of trehalose as vaccines' and recombinants' stabilizer. *11<sup>th</sup> Iranian Pharmaceutical Sciences Conference (Iranian Journal of Pharmaceutical Sciences 2008, 1(3), supplement 1), 18-21<sup>th</sup> August 2008, Kerman, Iran.*

- ❖ Mona Salimi, Forough Khadem, Hosein Zare Maivan. Extraction, Isolation and identification of alkaloids from two Berberis Species from Khorasan. *Duphat International Pharmaceutical & Technologies Conference*, 10-12<sup>th</sup> March 2008, Dubai, United Arab Emirates.
- ❖ Mona Salimi, Nazanin Abdipour, Ladan Pourabdi, Maryam Shahali, Mohammad Atyabi, Parisa Sarkhail, Minoo Hamraz. Production of trehalose from plant in comparison with other sources in market. *CSPS Annual Meeting*, 30 May to Jun 2<sup>nd</sup> 2007, Montreal, Canada.
- ❖ Mona Salimi, Ladan Pourabdi, Nazanin Abdipour, Maryam Zakeri, Behrouz Vaziri, Rasoul Mookhah, Tahereh Sadeghchah, Mohammad Mahmoodi Hashemi. Development of a simple & rapid HPLC method for purification of phenolic glycolipids of Mycobacterium Bovis. *European Symposium of Organic Chemistry*, 8-13<sup>th</sup> July 2007, Dublin, Ireland.
- ❖ Mona Salimi, Mohammad Hossein Ghahremani, Nima Naderi, Mohsen Amini, Elika Salimi, Massoud Amanlou, Khosrou Abdi, Raha Salehi, Abbas Shafiee. In vitro and In vivo evaluation of 4-[2-alkylthio-5 (4)-(4-substitutedphenyl) imidazole-4 (5)-yl] benzenesulfonamides as selective COX-2 inhibitors. *The 9<sup>th</sup> Iranian Congress of Toxicology( Journal of Iranian Pharmaceutical Sciences*, 3(2), 2007, supplement 1), 15-17<sup>th</sup> May 2007, Shiraz, Iran.
- ❖ Mona Salimi, Abbas Shafiee, Mohsen Amini, Mohammad Hossein Ghahremani, Naser Ostad. Synthesis and biological evaluation of 4-[2-alkylthio-5 (4)-(4-substitutedphenyl) imidazole-4 (5)-yl] benzenesulfonamides as selective COX-2 inhibitors. *Joint Meeting on Medicinal Chemistry*, Jun 20<sup>th</sup> to Jun 23<sup>rd</sup> 2005, P-S77, Vienna, Austria.
- ❖ Abbas Shafiee, Mohsen Amini, Mona Salimi. Synthesis of 2-alkylthio-4- (4-aminosulfonylphenyl)-5-aryl-1h-imidazoles. *21<sup>st</sup> International Symposium on the Organic Chemistry of Sulfur ISOCS-XXI*, 4-9<sup>th</sup> July 2004, P-63, Madrid, Spain.

- ❖ Raha Salehi, Mona Salimi, Mohsen Amini, Seyyed Naser Ostad, Abbas Shafiee, Mohammad Hossein Ghahremani. Evaluation of COX-2 inhibitors of newly synthesized compounds using an enzymatic assay. *16<sup>th</sup> Iranian Congress of Physiology and Pharmacology*, 9-13<sup>th</sup> May 2003, P-272, Tehran, Iran.
- ❖ Abbas Shafiee, Narges Yasa, Mona Salimi. Extraction, isolation and identification of alkaloids of *Heliotropium Dissitiflorum*. *7<sup>th</sup> Iranian Organic Chemistry Conference*, 12-13<sup>th</sup> Sept. 1999, P-206, Tehran, Iran.

### **Publications:**

- ❖ Abbas Shafiee, Mona Salimi, Hassan Farsam, Narges Yasa. Pyrrolizidine alkaloids from *Heliotropium Dissitiflorum* *Bioss. DARU*, 2003; 10(4); 168-170.
- ❖ Mona Salimi, Mohsen Amini, Abbas Shafiee. Syntheses of 2-Alkylthio- (4,5-Diaryl) imidazoles. *Phosphorus, Sulfur, and Silicon*, 2005; 180; 1587-1592.
- ❖ Mona Salimi, Mohammad Hossein Ghahremani, Nima Naderi, Mohsen Amini, Elika Salimi, Massoud Amanlou, Khosrou Abdi, Raha Salehi, Abbas Shafiee. Design, Synthesis and pharmacological evaluation of 4-[2-alkylthio-5 (4)-(4-substituted Phenyl) imidazole-4 (5) yl] benzenesulfonamides as Selective COX-2 Inhibitors. *Acta pharmacologica Sinica*, 2007, 28(8):1254-1260.
- ❖ Mona Salimi, Ladan Abdipour, Maryam Zakeri, Behrouz Vaziri, Nazanin Abdipour. Separation of phenolic glycolipids in *Mycobacterium Bovis* BCG by reversed-phase high performance liquid chromatography. *Pakistan Journal of Pharmaceutical Sciences*, 2009, 22(2):145-9.
- ❖ Faegheh Rezaee, Mona Salimi, Mohammad Hossein Ghahremani, Behrouz Vaziri. Potential molecular targets in chemopreventative action of celecoxib: a proteomics analysis of J774.A1 macrophage-like cell line. *Molecular Biosystem*, 2011, 7(4), 1306-11.

- ❖ Parisa Miralinaghi, Mona Salimi, Sara Shirmohammadali, Mohsen amini. Synthesis and cytotoxicity evaluation of diarylpyrazine and dihydropyrazine derivatives. *International Journal of Pharma and Bio Sciences*, 2011, 2(3), 60-64.
  
- ❖ Mona Salimi, Ahmad Majd, Zahra Sepahdar, Keyhan Azadmanesh, Mohammad Atyabi, Saeed Irian, Mohammad Hassan Ardestaniyan, Mohammad Hossein Hedayati, Noushin Rastkari. Cytotoxicity Effects of Various *Juglans regia* L. (Walnut) Leaf Extracts in Human Cancer Cell Lines. *Pharm Biol*, 2012, 50(11), 1416-1422.
  
- ❖ Reza Ahmadkhaniha, Nasrin Samadi, Mona Salimi, Parisa Sarkhail, Nooshin Rastkari. Simultaneous Determination of Parathion, Malathion, Diazinon, and Pirimiphos Methyl in Dried Medicinal Plants Using Soli Phase Microextraction Fibre Coated with Single-Walled Carbon Nanotubes. *The Scientific World Journal*, 2012, 2012, 627607.
  
- ❖ Khatereh Abdi, Hassan Hadadzadeh, Mathias Weil, Mona Salimi. Mononuclear copper(II) complex with terpyridine and an extended phenanthroline base, [Cu(tpy)(dppz)]<sup>2+</sup>: Synthesis, crystal structure, DNA binding and cytotoxicity activity. *Polyhedron*, 2012, 31, 638-648.
  
- ❖ Khatereh Abdi, Hassan Hadadzadeh, Mona Salimi, Jim Simpson, Aliakbar Dehno Khalaji. A mononuclear copper(II) complex based on the polypyridyl ligand 2,4,6-tris(2-pyridyl)-1,3,5-triazine (tptz), [Cu(tptz)<sub>2</sub>]<sup>2+</sup>: X-ray crystal structure, DNA binding and in vitro cell cytotoxicity. *Polyhedron*, 2012, 44, 101-112.
  
- ❖ Hassan Hadadzadeh, Mona Salimi, Matthias Weil, Zahra Jannesari, Farivash Darabi, Khatereh Abdi, Aliakbar Dehno Khalaji, Soroush Sardari, Reza Ahangari. The piroxicam complex of copper(II), trans-[Cu(Pir)<sub>2</sub>(THF)<sub>2</sub>], and its interaction with DNA. *Journal of Molecular Structure*, 2012, 1022, 172-180.

- ❖ Afshin Fassihi , Karim Mahnam , Behzad Moeinifard ,Maryam Bahmanziari , Hojjat Sadeghi Aliabadi , Afshin Zarghi, Razieh Sabet , Mona Salimi Mahboubeh Mansourian. Synthesis, calcium-channel blocking activity, and conformational analysis of some novel 1,4-dihydropyridines: application of PM3 and DFT computational methods. *Med Chem Res*, 2012,21, 2749-2761.
- ❖ Parisa Miralinaghi, Mona Salimi, Amirali Amirhamzeh, Mahnaz Norouzi, Hirsra Mostafapour, Abbas Shafiee, Mohsen Amini. Synthesis, molecular docking study, and anticancer activity of triaryl-1,2,4-oxadiazole. *Med Chem Res*, 2013,
- ❖ Reza Ahmadkhani, Mona Salimi, Nooshin Rastkari. Comparison of single-walled carbon nanotubes, multi-walled carbon nanotubes and C18 as adsorbents for the solid phase extraction of bisphenol A and bisphenol F in canned food. *Fullerenes, Nanotubes, and Carbon Nanostructures*, 2013, 21: 604–616.
- ❖ Mona Salimi, Masoumeh Esfahani, Narcis habibzadeh, Hamid Reza Aslani, AmirAmanzadeh, Mehrangiz Esfandiary, Bita Sedaghati, Sepideh Arbabi Bidgoli, & Mohammad Hossein Ghahremani. Change in nicotine-induced VEGF, PGE2 and COX-2 expression following COX Inhibition in Human Oral Squamous Cancer. *Journal of Environmental Pathology, Toxicology and Oncology*, 2012, 31(4):349-356.
- ❖ Hassan Hadadzadeh, Mona Salimi, Matthias Weil, Mohammad Taghi Behnamfar, Farivash Darabi. Complex conversion of the redox pair CoIII–NO<sub>2</sub> to CoII–NO<sub>3</sub>: Synthesis, crystal structure and DNA-binding of trans,trans,trans [Co(py)<sub>2</sub>(H<sub>2</sub>O)<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub>]. *Polyhedron*, 2013, 53, 179-186.
- ❖ Seyyed Mohammad atyabi, Azim Akbarzadeh, Mona Salimi, Seyyed Bahman Momen, Sedigeh Hatami Gigloo, Hossein Nemati, Dariush Norouzian. Optimization of penicillin G acylase immobilization process by surface response methodology using central composite design. *Applied Mathematics*, 2013, 4, 64-69.
- ❖ Seyyed Mohammad atyabi, Sedigeh Hatami Gigloo, Mona Salimi, Seyyed Bahman Momen, Azim Akbarzadeh, Dariush Norouzian. Enzymatic synthesis

of ampicillin by immobilized penicillin G acylase of *E.coli*. *BIOSCIENCES BIOTECHNOLOGY RESEARCH ASIA*, 2012, 79(2), 677-681.

- ❖ Seyyed Bahman Momen, Seyyed Mohammad Atyabi, Azim Akbarzadeh, Mona Salimi, Sedigeh Hatami Gigloo, Ali Farhangi, Dariush Norouzian. Characteristics of penicillin G acylase immobilized onto iron oxide nanoparticles. *British Biotechnology Journal*. 3(3), 2013, 367-376.
- ❖ Mahnaz Norouzi, Saeed Irian, Adeleh Divsalar, Mona Salimi. A Study on the DNA Cleavage, Morphological Changes and Cytotoxicity Activities of the Two Synthetic COX-2 Inhibitors. *JRP*, 2013, 2(1), 38-44.
- ❖ Farid Hajareh Haghighi, Hassan Hadadzadeh, Farivash Darabi, Zahra Jannesari, Malihe Ebrahimi, Taghi Khayamian, Mona Salimi, Hadi Amiri Rudbari. Polypyridyl Ni(II) complex, [Ni(tppz)<sub>2</sub>]<sup>2+</sup>: Structure, DNA- and BSA binding and molecular modeling. *Polyhedron*, 2013, 65, 16-30.
- ❖ Mona Salimi, Mohammad Hassan Ardestaniyan, Hirsā Mostafapour Kandelous, Soudabeh Saeednia, Ahmadreza Gohari, Kayhan Azadmanesh, Amir Amanzadeh, Hassan Santai, Zahra Sepahdar, Samira Ghorbani, Misha Salimi. Antiproliferative and apoptotic activities of the constituents of chloroform extract of *Juglans regia* leaves. *Cell Proliferation*, 2013, 47, 172-179.
- ❖ Hoda Gudarzia, Mona Salimi, Saeed Irian, Amir Amanzadeh, Hirsā Mostafapour Kandelous, Keyhan Azadmanesh, Misha Salimi. Ethanolic extract of *Ferula gummosa* is cytotoxic against cancer cells by inducing apoptosis and cell cycle arrest. *Natural Product Research*, 2014, 1-5.
- ❖ Mahnaz Norouzi, Shaghayegh Norouzi, Mohsen Amini, Amir Amanzadeh, Saeed Irian, Mona Salimi. Apoptotic effects of two COX-2 inhibitors on breast adenocarcinoma cells through COX-2 independent pathway. *Journal of cellular biochemistry*, 2015, 116, 81-90.
- ❖ Mona Salimi, Khatereh Abdi, Hirsā Mostafapour Kandelous, Hassā Hadadzadeh, Kayhan Azadmanesh, Amir Amanzadeh, Hassan Sanati.

Antiproliferative effects of Copper(II)-polypyridyl complexes in breast cancer cells through inducing apoptosis. *BioMetals*, 2015, 28, 267-78.

- ❖ Shaghayegh Norouzi, Mahnaz Norouzi, Mohsen Amini , Amir Amanzadeh, Mohammad Nabiuni, Saeed Irian, Mona Salimi. Two COX-2 inhibitors induce apoptosis in human erythroleukemia K562 cells by modulating NF- $\kappa$ B and FHC pathways. *Daru* 2016, 24(1),1.
- ❖ Fatemeh Farmani, Mahmoodreza Moein, Amir Amanzadeh, Hirs Mostafapour Kandelous, Zahra Ehsanpour , Mona Salimi. Antiproliferative Evaluation and Apoptosis Induction in MCF- 7 Cells by *Ziziphus spina christi* Leaf Extracts. *Asian Pacific Journal of Cancer Prevention*, 2016, 17(1), 315-21.
- ❖ Hirs Mostafapour Kandelous, Misha Salimi, Vahid Khori, Noushin Rastkari, Amir Amanzadeh , Mona Salimi. Mitochondrial apoptosis induced by *Chamaemelum nobile* extract in breast cancer cells. *IJPR*, 2016, accepted.
- ❖ Shahrzad Tavakolfar, Elham Musavi, Ali Almasirad, Amir Amanzadeh, Seyyed Mohamamd Atyabi, Parichehr Yaghamii, Somayeh Samiee-Sadr, Mona Salimi. In vitro anticancer effects of two new potent hydrazide compounds in leukemic cells. *Anticancer Agents in Medicinal Chemistry*, 2016, accepted.

## **Students' Thesis:**

### **Supervisor;**

- ❖ Extraction, Isolation and identification of phenolic glycolipids from *Mycobacterium Bovis* BCG (MSc. Of Organic Chemistry, Sharif University).
- ❖ Evaluation of celecoxib as selective COX-2 inhibitor in protein profile expression of macrophage stimulated by LPS ( Pharm D, Tehran University of Medical Sciences).
- ❖ Quantification of COX-2 protein expression in oral squamous cell carcinoma after nicotine and celecoxib treatment. (MSc. Of Biochemistry, Payamenoor University).

- ❖ Evaluation of anticancer effects of the leaves of *Juglana Regia* on 3 different cancer cell lines. ( MSc. Of Plant Biology, Tarbiat-moallem University).
- ❖ Isolation, purification and identification of anticancer compounds from walnut leaves ( MSc. Of Biotechnology, Payamenoor University).
- ❖ Synthesis and Evaluation of DNA interaction of some metal complexes of piroxicam. (MSc. Of Inorganic Chemistry, Isfahan University of Technology).
- ❖ Quantification of ERK and P-ERK in oral carcinoma treated by celecoxib and Nicotine ( Pharm.D. Pharmaceutical Branch of Islamic Azad University).
- ❖ Evaluation of DNA interaction, cytotoxicity assay and cell cycle analysis of some copper- complex compounds as anticancer drugs (MSc. of Inorganic Chemistry, Isfahan University of Technology).
- ❖ Mononuclear, dinuclear and polymeric complexes of Cu(II) with polypyridil ligands: synthesis, characterization, crystal structure, interaction with DNA and BSA and invitro anticancer activity (Ph.D. of Inorganic Chemistry, Isfahan University).
- ❖ Anticancer and apoptotic effects of COX-2 inhibitor derivatives on leukemia (MSc. of Biochemistry, Kharazmi University)
- ❖ Evaluation of upstream pathway of apoptosis induced in leukemia cell line by COX-2 inhibitor derivatives (MSc. of Biochemistry, KharazmiUniversity).
- ❖ Antiproliferative activity of different *Ferula gummosa* extracts on a variety of cancer cell lines (MSc. of Plant Biology, Kharazmi University).
- ❖ Evaluation of Persian Golf Sea Cucumber: *Stichopus horens* & *Holothuria leospilota*, by MTT test on T-47D and HT29 cells (Pharm.D., Faculty of Pharmacy, Ahvaz University of Medical Sciences).
- ❖ Evaluation of the recombinant NGR-tIL-24 protein targeted into the cancer cells. (Ph.D., Pasteur Institute of Iran).
- ❖ Evaluation of ERK, CREP, c-Fos expression in the hippocampus of rats treated with ACEA or Capsazepine in kindling model (Pharm.D. , Faculty of Pharmacy, Shahid Beheshti University of Medical Sciences)
- ❖ The role of mesenchymal stem cell on the invasive characteristics of breast cancer and evaluation of two COX-2 inhibitor derivatives in this pathway (MSc. of Biochemistry, Kharazmi University)
- ❖ Study on the ontogenic-developmental structure of *Fumaria vaillantii* L. (Fumariaceae) and its anticancer effects in cancer and normal cell lines (MSc. of Plant Biology, Kharazmi University).

- ❖ Evaluating the effect of bone marrow mesenchymal stem cells on induction of Epithelial-Mesenchymal Transition in breast cancer cells using cellular-molecular, proteomics and bioinformatics techniques (Ph.D. of Proteomics. Shahid Beheshti University of Medical Sciences).
- ❖ Topical gel formulation of *Fumaria vaillantii* total extract and evaluation of its efficacy in rat wound healing (Pharm.D., School of Pharmacy, Pharmaceutical branch of Azad Islamic University).
- ❖ Evaluation of anti-cancer activity of two fluoro and chloro derivatives of 1,2,4-oxadiazole structures as COX-2 inhibitors in an invivo model of breast cancer (MSc. of Toxicology, Pharmaceutical branch of Azad Islamic University).
- ❖ Cytotoxicity evaluation of two new triaryl oxadiazole derivative in cardiomyoblast cell line(H9C2) (MSc. of Toxicology, Tarbiat Modarres University)

#### Co- Supervisor:

- ❖ The comparative study of the extracted alkaloids of berberis species from Khorasan ecological region and their effects on the growth and viability of *Mycobacterium Bovis* BCG (MSc. Of Plant Biology, Tarbiat Modarres).
- ❖ Membrane protein profile expression of LPS stimulated macrophages treated with celecoxib (MSc. Of Biochemistry, TehranAzadUniversity).
- ❖ Cell culture optimization and genetic manipulation of *Streptomyces Pilosus* to increase yield production of Desferrioxamin B. (MSc. Of Microbiology, ZanjanAzadUniversity).
- ❖ Evaluation of one analog of celecoxib as selective COX-2 inhibitor in protein profile expression of macrophage stimulated by LPS (MSc. Of Immunology, ShahidBeheshtiUniversity).
- ❖ Ciprofloxacin copper (II) complexes: the study of interaction of [Cu(cip)2(OH)2] with DND (MSc. Of Inorganic Chemistry, Isfahan University of Technology)
- ❖ Ferrocenes; spectroscopic and electrochemical properties, spin crossover and glucose sensor (MSc. Of Inorganic Chemistry, Isfahan University of Technology).
- ❖ Evaluation of some 3-Isothiazolone derivatives on histone acetyl tranferase inhibition ( Pharm.D., Ahvaz University of Medical sciences).

- ❖ ***In vitro* and *In vivo* Treatment efficacy of selected antimicrobial peptides( Brevinin 2R, Melittin-Cecropin, Jellein) in presence and absence of CpG motif against *Leishmania major* infection (Ph.D. of biotechnology, Pasteur Institute of Iran).**
- ❖ **Phytochemical investigation and cardioprotective effects of *Potentilla reptans* root extract and its polyphenol fraction on ischemia/reperfusion injury in isolated rat heart (Ph.D. of Pharmacognosy, Tehran University of Medical sciences).**
- ❖ **Evaluation of carvacrol and thymol on PKc activity and expression and cellular toxicity induced by beta amyloid in an invitro and invivo model (Ph.D. of Biotechnology, Pasteur Institute of Iran).**
- ❖ **Inhibiting effect of silver nanoparticles on EPA6 gene expression forming biofilm in *Candida glabrata* and cytotoxicity measurement by Real- Time RT-PCR and cell culture (Ph.D. of mycology, Islamic azad University of Tehran).**
- ❖ **Effects of training on AB cleaning before and after of Alzheimer disease induction (Ph.D. of Physiology, Tehran University).**
- ❖ **Effects of training on BNDF, FNDC5 and PGC-1a gene expression before and after of Alzheimer disease induction (Ph.D. of Physiology, Tehran University).**