

Massoumeh Shafiei
Department of Pharmacology, School of Medicine
Iran University of Medical Sciences
Hemmat Highway, PO Box 14155-6183
Tehran, Iran
E-mail: shafiei.m@iums.ac.ir

نام و نام خانوادگی: معصومه شفیعی
مدرک تحصیلی: دکترای تخصصی (PhD) فارماکولوژی
رشته: فارماکولوژی
رتبه: استناد
سابقه کار: 36 سال
محل فعلی آموزشی: گروه فارماکولوژی، دانشکده پزشکی
آدرس E-mail: shafiei.m@iums.ac.ir

Education;

- Ph.D. in Pharmacology (Iran Univ. Med. Sci.), **Thesis:** Comparative study of vascular β -adrenoceptor responsiveness in two animal and human models (rat thoracic aorta & human internal mammary artery (1999)
- Doctorate in Pharmacy (Tehran Univ. Med. Sci.), **Thesis:** Study of the anti-fungal activity of selected native Iranian flora (1989)

Position Held;

- Professor of Pharmacology, School of Medicine
Iran Univ. Med. Sci. (Tehran, Iran) Oct 2014 – Present
- Associate Professor of Pharmacology, School of Medicine,
Iran Univ. Med. Sci. (Tehran, Iran) June 2004 – Oct 2014
- Assistant Professor of Pharmacology, School of Medicine,
Iran Univ. Med. Sci. (Tehran, Iran) Feb 1999 – June 2004
- Instructor of pharmacology, School of Medicine, Iran Univ. Med. Sci.
(Tehran, Iran) July 1989-Feb 1999

Courses taught;

- Advanced cardiovascular pharmacology for PhD students
- Advanced chemotherapy for PhD students
- Pharmacology for Medical Students
- Pharmacology for Nursing Students
- Pharmacology for Midwifery Students
- Pharmacology for Health Care Students
- Pharmacology for Para-Medical Students

Main research interest;

- Cardiovascular pharmacology
- Medicinal plants

Publications:

- Mahmoudian, M., **Shafiei, M.**, Mirkhani, H., Omrani, Gh.R. Effects of different vasodilators on human internal mammary artery in vitro. *The Congress of International Society on Oxygen Transport to Tissues*, 1998 (ISOTT 98), Hungary
- **M. Shafiei** & M. Mahmoudian. Atypical β -adrenoceptors of rat thoracic aorta. *General Pharmacology* (1999) 32: 557-62.
- **Massoumeh Shafiei**, Gholamreza Omrani, Massoud Mahmoudian. Coexistence of at least three distinct beta-adrenoceptors in human internal mammary artery. *Acta Physiologica Hungarica* (2000) 87(3): 275-286.
- **M. Shafiei**, M. Nobakht, M. Fattahi, L. Kohnesh-Shahri, M. Mahmoudian. Histochemical assessment of nitric oxide synthase activity in aortic endothelial cells of streptozotocin-induced diabetic rats. *Pathophysiology* (2003) 10: 63-67.
- A. Nahavandian, S. Khamse, **M. Shafiei**, M. Mahmoudian. Aortic responsiveness to nitric oxide is affected by seasonal variation. *Pathophysiology* (2006) 13(2): 67-9.
- **M. Shafiei**, M. Mahmoudian, P Rostami, F. Nemati. Effect of sildenafil (Viagra) on memory retention of a passive avoidance response in rats. *Acta Physiologica Hungarica* (2006) 93 (1): 53-59.
- S.A. Ebrahimi, T. Saghaeian-Shahri, **M. Shafiei**, P. Rostami, M. Mahmoudian. Interaction of papaverine with the enalapril-induced cough in guinea-pig. *Acta Physiologica Hungarica* (2006) 93(1): 71-78.
- F. Sepahvand, P. Rahimi-Moghaddam, **M. Shafiei**, S.M. Ghaffari, M. Mahmoudian. Frequency of Paraoxonase 192/55 polymorphism in an Iranian population. *Journal of Toxicology and Environmental Health: Part A*. (2007) 70: 1125-1129.
- F. Sepahvand, **M. Shafiei**, S.M. Ghaffari, P. Rahimi-Moghaddam, M. Mahmoudian. Paraoxonase phenotype distribution in a healthy Iranian population. *Basic & Clinical Pharmacology & Toxicology*. (2007) 101: 104-107.
- B. Gholamine, **M. Shafiei**, M. Motevallian, M. Mahmoudian. Effects of pioglitazone on erectile dysfunction in sildenafil poor-responders: a randomized, controlled study. *Journal of Pharmacy & Pharmaceutical Sciences* (2008) 11(1): 22-31.
- Farkhondeh Nemati, Nahid Rahbar-Roshandel, Fatemeh Hosseini, Massoud Mahmoudian, **Massoumeh Shafiei**. Anti-inflammatory effects of anti-hypertensive

agents: influence on interleukin-1beta secretion by peripheral blood polymorphonuclear leukocytes from patients with essential hypertension. *Clinical and Experimental Hypertension* (2011) 33(2): 69-76.

- Negar Firouzabadi, Nader Tajik, **Massoumeh Shafiei**, Soltan Ahmed Ebrahimi, Hooman Bakhshandeh. Interaction of A-240T and A2350G related genotypes of angiotensin-converting enzyme (ACE) is associated with decreased serum ACE activity and blood pressure in a healthy Iranian population. *European Journal of Pharmacology* (2011) 668: 241-247.

- Massoud Mahmoudian, Nahid Aboutaleb, Farahnaz Beiranvand, Ashraf-Alsadat Moazzam, **Massoumeh Shafiei**. Noscipine antagonizes vasoconstrictor action of bradykinin in isolated human umbilical artery. *Medical Journal of Islamic Republic of Iran* (2011) 25(2): 82-86.

- Parvaneh Rahimi-Moghaddam, Soltan Ahmad Ebrahimi, Hourmazd Ourmazdi, Monavvar Selseleh, Maryam Karjalian, Giti Haj-Hassani, Mohammad Hossein Alimohammadian, Massoud Mahmoudian, **Massoumeh Shafiei**. In vitro and in vivo activities of *Peganum harmala* extract against *Leishmania major*. *Journal of Research in Medical Sciences* (2011) 16(8): 1032-1039.

- **M. Shafiei**, M. Nobakht, A.A. Moazzam. Lipid-lowering effect of *Rhus coriaria* L. (sumac) fruit extract in hypercholesterolemic rats. *Pharmazie* (2011) 66: 988-992.

- Negar Firouzabadi, Nader Tajik, Ehsan Bahramali, Hooman Bakhshandeh, Soltan Ahmed Ebrahimi, Mohsen Maadani, Maryam Rasoulia, Tahereh Mobasheri, **Massoumeh Shafiei**. Association of angiotensin-converting enzyme polymorphism with coronary artery disease in Iranian patients with unipolar depression. *Clinical Biochemistry* (2012) 45: 1347-1352.

- Zahra Kiani, **Massoumeh Shafiei**, Parvaneh Rahimi-Moghaddam, Ali Asghar Karkhane, Soltan Ahmed Ebrahimi. In vitro selection and characterization of deoxyribonucleic acid aptamers for digoxin. *Analytica Chimica Acta* (2012) 748: 67-72.

- Negar Firouzabadi, **Massoumeh Shafiei**, Ehsan Bahramali, Soltan Ahmed Ebrahimi, Hooman Bakhshandeh, Nader Tajik. Association of angiotensin-converting enzyme (ACE) gene polymorphism with elevated serum ACE activity and major depression in an Iranian population. *Psychiatry Research* (2012) 200: 336-342.

- Negar Firouzabadi, Nader Tajik, Ehsan Bahramali, Hooman Bakhshandeh, Mohsen Maadani & **Massoumeh Shafiei**. Gender specificity of a genetic variant of angiotensin-converting enzyme and risk of coronary artery disease. *Molecular Biology Reports* (2013) 40: 4959-4965.

- Ehsan Bahramali, Negar Firouzabadi, Nematollah Jonaidi-Jafari, **Massoumeh Shafiei**.

Renin angiotensin system genetic polymorphism: Lack of association with CRP levels in patients with coronary artery disease. *Journal of the Renin-Angiotensin-Aldosterone System* (2014) 15: 559-565.

- Naser Abbasi, Maziar Mohammad Akhavan, Nahid Rahbar-Roshandel, **Massoumeh Shafiei**. The effects of low and high concentrations of luteolin on cultured human endothelial cells under normal and glucotoxic conditions: Involvement of integrin-linked kinase and cyclooxygenase-2. *Phytotherapy Research* (2014) 28: 1301-1307.

- Anita Barzegar-Fallah, Houman Alimoradi, Firouzeh Asadi, Ahmad Reza Dehpour, Mojgan Asgari, **Massoumeh Shafiei**. Tropisetron ameliorates early diabetic nephropathy in streptozotocin-induced diabetic rats. *Clinical and Experimental Pharmacology and Physiology* (2015) 42: 361-368.

- Anita Barzegar-Fallah, Houman Alimoradi, Ali Razmi, Ahmad Reza Dehpour, Mojgan Asgari, **Massoumeh Shafiei**. Inhibition of calcineurin/NFAT pathway plays an essential role in renoprotective effect of tropisetron in early stage of diabetic nephropathy. *European Journal of Pharmacology* (2015) 767: 152-159.

- Naser Abbasi, Afra Khosravi, Ali Aidy, **Massoumeh Shafiei**. A biphasic response to luteolin in MG-63 osteoblast-like cells under high-glucose-induced oxidative stress. *Iranian Journal of Medical Sciences* (2016) 41: 118-125.

- Firouzeh Asadi, Ali Razmi, Ahmad Reza Dehpour, **Massoumeh Shafiei**. Tropisetron inhibits high glucose-induced calcineurin/NFAT hypertrophic pathway in H9c2 myocardial cells. *Journal of Pharmacy and Pharmacology* (2016) 68: 485-493.

- Roohangiz Mameneh, **Massoumeh Shafiei**, Ali Aidy, Elahe Karimi, Behzad Badakhsh, Naser Abbasi. Toxicity study of silver nanoparticles synthesized from aqueous flower extract of *scrophularia striata* on MCF-7 human breast cancer cell line. *Pharmacognosy Magazine* (2019) 14: 66-72.

- Ehsan Aali, Habib Ghaznavi, Mohammad Soleiman Soltanpour, Massoud Mahmoudian, **Massoumeh Shafiei**. Cardioprotective effects of mebudipine in a rat model of doxorubicin-induced heart failure. *Iranian Journal of Medical Sciences* (2020) 10.30476/ijms.2019.82057.0.

- Foad Ghazizadeh, **Massoumeh Shafiei**, Reza Falak, Mahshid Panahi, Naser Rakhshani, Soltan Ahmed Ebrahimi, Parvaneh Rahimi-Moghaddam. Xanthomicrol exerts antiangiogenic and antitumor effects in a mouse melanoma (B16F10) allograft model. *Evidence-Based Complementary and Alternative Medicine* (2020) <https://doi.org/10.1155/2020/8543872>

- Farideh Malakootikhah, Hossein Naghavi, Negar Firouzabadi, Mohsen Maadani, **Massoumeh Shafiei**, Nader Tajik. Association of human platelet alloantigens

encoding gene polymorphisms with the risk of coronary artery disease in Iranian patients. *BMC Cardiovascular Disorders* (2021) 21: 68 <https://doi.org/10.1186/s12872-021-01892-z>

- Firouzeh Asadi, Ali Razmi, Foad Ghazizadeh, **Massoumeh Shafiei**. Protective effect of ellagic acid against angiotensin II-induced cardiomyocyte hypertrophy in H9c2 myocardial cells: role of calcineurin/NFAT pathway. *Journal of Medicinal Plants* (2021) 20(78): 1-13.
doi: 10.52547/jmp.20.78.1

- Elaheh Abdollahi, Fariborz Keyhanfar, Ali-Akbar Delbandi, Reza Falak, Seyed Javad Hajimiresmaiel, **Massoumeh Shafiei**. Dapagliflozin exerts anti-inflammatory effects via inhibition of LPS-induced TLR-4 overexpression and NF- κ B activation in human endothelial cells and differentiated macrophages. *European Journal of Pharmacology* (2022) Mar 5:918:174715. doi: 10.1016/j.ejphar.2021.174715

- Anita Barzegar-Fallah, Pejman Ghaffari-Bohlouli, Shabnam Nadjafi, Ahmad Reza Dehpour, Ali Ghaffarian-Bahraman, Houman Alimoradi, Ali Razmi, Massoumeh Shafiei. Tropisetron attenuates high-glucose-induced vascular endothelial dysfunction via inhibition of calcineurin/NFAT signaling. *European Journal of Pharmacology* (2025) May 5:994:177389. doi: 10.1016/j.ejphar.2025.177389

Abstracts:

- Milanian, I; Mahmoudian, M & Shafiei, M.
The effects of imipramine and cocaine on ganglionic transmission of guinea-pig ileum. *International Congress of Pharmacology*, Netherlands, 1990, P.th.400

- Shafiei, M & Mahmoudian, M.
Study on the role of β -adrenoceptors in relaxation of smooth muscle of rat thoracic aorta in vitro.
14th Iranian Congress of Physiology and Pharmacology

- Selseleh, M; Alimohammadian, M-H; Ourmazdi, H; Soleimani, Z; Shafiei, M & Mahmoudian M.
The study on the effects of Peganum harmala extract on the lesions of cutaneous leishmaniasis in mice.
16th Iranian Congress of Physiology and Pharmacology

- Shafiei, M; Nobakht, M; Fattahi, M; Kohnesh-Shahri L & Mahmoudian M.
Diabetic-Induced endothelial dysfunction in rat aorta: Assessment of NO synthase activity using NADPH diaphorase staining.
16th Iranian Congress of Physiology and Pharmacology

- Shafiei, M; Kayhani, M; Nikpay, H-R & Mostafaei-Rad, P.
Antifungal activity of Peganum harmala seeds extract in vitro.

2nd International Congress on Traditional Medicine and Materia Medica

- Shafiei M, Homayounfar H, Mansouri Z, Mahmoudian M.
The role of classic β -adrenoceptors in Dobutamine-induced vasorelaxation in rat isolated aorta.

15th World Congress of Pharmacology, Beijing, China

- Shafiei M, Chalian M, Mooraki A, Raygan S, Ghane M, Beiranvand F, Aboutaleb N, Mahmoudian M.

Cardiovascular effects of noscapine.

18th Iranian Congress of Physiology and Pharmacology

- Shafiei M, Nemati F, Rahbar R. N.

Hydrochlorothiazide increases interleukin-1 beta secretion by peripheral blood mononuclear cells in healthy subjects.

9th Iranian Congress of Immunology and Allergy, 2008

- Shafiei M, Nobakht M, Moazzam AA.

Lipid-lowering effect of *Rhus coriaria* L. (sumac) fruit extract in hypercholesterolemic rats.

20th Iranian Congress of Physiology and Pharmacology, 2011

- Massoumeh Shafiei, Negar Firouzabadi, Nader Tajik, Ehsan Bahramali, Hooman Bakhshandeh, Mohsen Maadani.

Gender specificity of a genetic variant of angiotensin-converting enzyme and risk of coronary artery disease.

21st Iranian Congress of Physiology and Pharmacology, 2013

- Elaheh Abdollahi, Fariborz Keyhanfar, Ali-Akbar Delbandi, Reza Falak, Mansour Torab, Massoumeh Shafiei.

Dapagliflozin exerts anti-inflammatory effects via inhibition of LPS-induced TLR-4 overexpression and NF- κ B activation in human endothelial cells and differentiated macrophages.

16th International Congress of Immunology and Allergy, 2023

Awards;

– Iran University of Medical Sciences Scholarship to study for PhD 1992

مقالات فارسی:

- معصومه شفیعی، غلامرضا عمرانی، مسعود محمودیان.
بررسی پاسخ دهی گیرنده های بتا-آدرنرژیک موجود در عضلات صاف سرخرگ پستانی داخلی انسان. مجله
174-161 ، صفحه 79 ، پائیز و زمستان 2، شماره 4 فیزیولوژی و فارماکولوژی، جلد

- معصومه شفیعی
22، تأثیر بیماری ها بر پاسخدهی گیرنده های بتا-آدرنرژیک. مجله دانشگاه علوم پزشکی ایران، سال هفتم، شماره 284-294، صفحه 1379 زمستان

- معصومه شفیعی، همایون همایونفر، مسعود محمودیان، اسماعیل ایزدیناه
بررسی اثرات عروقی تجویز مزمن دو داروی سولفونیل اوره از نسل اول (کلرپروپامید) و نسل دوم (گلی بن کلامید) بر عملکرد آنورت سینه ای موش صحرایی سالم. مجله دانشگاه علوم پزشکی ایران، شماره فوق العاده 1382 دوم، سال

- میترا خاکپور، معصومه شفیعی، پروین رستمی، مهرانگیز صدوقی، مسعود محمودیان
شماره 18 اثر نوسکاپین بر التهاب ناشی از کاراژینان در موش صحرایی (رات). مجله زیست شناسی ایران، جلد 150-155، صفحه 1384، تابستان 2

- نسرین شیرین، معصومه شفیعی، شاهرخ پاشایی راد، مسعود محمودیان
اثر نوسکاپین بر التهاب حاصل از برادی کینین و هیستامین در کف پای موش صحرایی. مجله گیاهان دارویی، 30-35، صفحه 1385، بهار 18 شماره

- ملیحه نوبخت، معصومه شفیعی، پروانه طباطبایی، طحیه رستگار
بررسی اثر تاموکسیفن بر روی فعالیت آنزیم نیتریک اکسید سینتاز (NOS) در تکامل هیپوکامپ موش صحرایی. مجله دانشگاه علوم پزشکی ایران، دوره پانزدهم، شماره 59، تابستان 1387، صفحه 181-190

- معصومه شفیعی، مجید چالیان، احمد مورکی، سمیرا رایگان، مهرانوش قانع، اشرف السادات معظم، مسعود محمودیان
اثرات قلبی-عروقی نوسکاپین، آکالوئید ضد سرفه تریاک. مجله دانشگاه علوم پزشکی ایران، شماره 74، مرداد ماه 1389، صفحه 43-51

سابقه مسئولیت های اجرایی:

- عضو شورای عالی مرکز تحقیقات علوم دارویی رازی
- عضو کمیته ناظر بر تدوین استانداردهای آموزش پزشکی عمومی در وزارت بهداشت درمان و آموزش پزشکی
- عضو شورای آموزشی علوم پایه پزشکی در دانشکده پزشکی
- عضو گروه نظارت بر تجویز و مصرف دارو در دانشگاه
- عضو کمیته پژوهشی مرکز تحقیقات علوم دارویی رازی در دانشگاه علوم پزشکی ایران
- مسئول آزمایشگاه قلب و عروق گروه فارماکودینامی در مرکز علوم دارویی رازی
- عضو هیئت تحریریه مجله اینترنتی مرکز تحقیقات علوم دارویی رازی (به زبان انگلیسی)
- Iranian Journal of Pharmacology and Therapeutics (IJPT)
- عضو گروه آموزشی پزشکی عمومی در دانشگاه علوم پزشکی ایران
- استاد مشاور دانشجویان پزشکی شاهد و ایثارگر در مقطع پاتوفیزیولوژی
- عضو هیئت تحریریه نشریه علمی معاونت درمان سازمان تامین اجتماعی
- عضو شورای علمی گروه پژوهشی فارماکولوژی و طب کاربردی در پژوهشکده گیاهان دارویی وابسته به جهاد دانشگاهی
- سردبیر فصلنامه گیاهان دارویی وابسته به پژوهشکده گیاهان دارویی جهاد دانشگاهی
- سردبیر مجله الکترونیکی Iranian Journal of Pharmacology and Therapeutics
- معاون آموزشی تحصیلات تکمیلی در گروه فارماکولوژی
- عضو شورای آموزش تحصیلات تکمیلی و علوم پایه دانشکده پزشکی
- عضو هیئت متحنه و ارزشیابی رشته فارماکولوژی در وزارت بهداشت

