Mahdieh Eftekhari

Assistant Professor

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Education

PhD of Pharmacognosy - Department of Pharmacognosy, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran (2014 -2018).

■ PhD Thesis title: Phytochemical Investigation of Oliveria decumbens Vent. and its antibacterial effect

Pharm.D. - Department of Pharmacology, Faculty of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran

■ Pharm. D. Thesis title: Anti-Inflammatory Activity of a Selection of Antidepressant Drugs

SUMMARY OF QUALIFICATIONS:

- Pharm.D., PhD in Pharmacognosy with research experiences in bio-active compounds separation, structure identification and biological assay
- Wrote and published more than 20 papers (ISI or PubMedod) herbal analysis and biological effects
- Experience in several biological in vivo and in vitro
- Experience in instrumental analysis such as GC/MS, NMR
- Experience in preparing PMF(Product Master File) and physicochemical evaluation and characterization of natural medicine and herbal formulation
- Good writing and oral skills; excellent organization and time management skills

Awards & Achievements

Outstanding student (PhD) in Department of Pharmacognosy, Faculty of Pharmacy, Tehran University of Medical Sciences

Top student in board exam

Publications

Journal Papers

- 1. Balaei-Kahnamoei, Majid, Mahdieh Eftekhari, Mohammad Reza Shams Ardekani, Tahmineh Akbarzadeh, Mina Saeedi, Hossein Jamalifar, Maliheh Safavi, Sohrab Sam, Naghmeh Zhalehjoo, and Mahnaz Khanavi. "Phytochemical constituents and biological activities of Salvia macrosiphon Boiss." BMC chemistry 15, no. 1 (2021): 1-7.
- 2. Arash Almasian, Farhood Najafi, Mahdieh Eftekhari, Mahnaz Khanavi, Polyurethane/Carboxymethylcellulose nanofibers containing Malva sylvestris extract for healing diabetic wounds: Preparation, Characterization, in vitro and in vivo studies. Materials Science & Engineering C. (2020): 111-139.
- 3. Mina Saeedi, Yasaman Vahedi-Mazdabadi, Arezoo Rastegari, Mahdieh Soleimani, Mahdieh Eftekhari, Tahmineh Akbarzadeh, Mahnaz Khanavi. "Evaluation of Asarum europaeum L. Rhizome for the Biological Activities Related to Alzheimer's Disease." Research Journal of Pharmacognosy 7.3 (2020): 25-33.
- **4.** Sahar Omidpanah, Yasaman Vahedi-Mazdabadi, Azadeh Manayi, Arezoo Rastegari, Roshanak Hariri, Elahe Mortazavi-Ardestani, **Mahdieh Eftekhari**, Mahnaz Khanavi, Tahmineh Akbarzadeh, Mina Saeedi "Phytochemical investigation and anticholinesterase activity of ethyl acetate fraction of Myristica fragrans Houtt. seeds." *Natural Product Research* (2020): 1-7.
- 5. Mahdieh Eftekhari, Afsaneh Hoseinsalari, Fatemeh Farjadmand, Mohammad Reza Shams Ardekani, Mohammad Sharifzadeh, Gholamreza Hassanzadeh, Mahdi Gholami, Mahnaz Khanavi. "Trachyspermum ammi superb essential oil and its major components on rat's peptic ulcers". DARU Journal of Pharmaceutical Sciences (2019) 27:317–327.
- 6. Mahdieh Eftekhari, Mohammad Reza Shams Ardekani, Mohsen Amin, Farideh Attar, Tahmineh Akbarzadeh, Maliheh Safavi, Elahe Karimpour-razkenari, Mohsen Amini, Murray Isman, Mahnaz Khanavi." Oliveria decumbens, a bioactive essential oil: Chemical composition and biological activities". Iranian Journal of Pharmaceutical

- Research, 2019,18 (1),412-421.
- **7. Mahdieh Eftekhari,** Aysheh Enayati, Mohammad Reza Shams Ardekani, Tahmineh Akbarzadeh, Elahe Karimpour Razkenari, Mahnaz Khanavi. "Cytotoxic activity of the essential oil of *Juniperus excelsa* M. Bieb. leaves". *Research Journal of Pharmacognosy* 2019, 6(2), 1-7.
- **8.** Amir Hossein Doustimotlagh, Salman Taheri, Mahboubeh Mansourian, **Mahdieh Eftekhari.** "Extraction and identification of two flavonoids in *Phlomoides hyoscyamoides* as endemic plant of Iran: The role of quercetin in the activation of the glutathione peroxidase, the improvement of the hydroxyproline and protein oxidation in bile duct-ligated rats" *Current Computer-Aided Drug Design*, (2019).
- 9. Mahdieh Eftekhari, Fatemeh Oskou, Parvaneh Jafari, Mohammad Reza Shams Ardekani, Elahe Motevaseli, Zahra Tofighi ."Cytotoxic Activity of *Dorema aucheri*: a Medicinal and Edible Plant of Iran". *Journal of Medicinal Plants* 3.71 (2019): 77-84.
- 10. Shadi Izadpanah, Amir Hossein Abdolghaffari, Fatemeh Farjadmand, Mahdieh Eftekhari, Maryam Baeeri, Mahban Rahimifard, Saeideh Momtaz, Mohammad Abdollahi, Roja Rahimi, Mohammad Reza Shams Ardekani. Beneficial Effects of Trachyspermum ammi (L.) Sprague on Rat Irritable Bowel Syndrome. 2019, 6(2).
- **11.** Fatemeh Farjadmand, Mahnaz Khanavi, **Mahdieh Eftekhari**, Afsaneh Hosseinsalari, Tahmineh Akbarzadeh, Mohammad Reza Shams Ardekani. "The effect of extraction method on the major constituents and biological effects of Trachyspermum ammi L.'s fruits." Research Journal of Pharmacognosy 2018, 5 (1), 55-61.
- **12. Eftekhari, Mahdieh**, Mohammadreza Shams Ardekani, Mohsen Amini, Tahmineh Akbarzadeh, Maliheh Safavi, Elaheh Karimpour, Mahnaz Khanavi. "Biological activities of the essential oil and total extract of Salvia macrosiphon Boiss." *Journal of Basic and Clinical Pharmacy* 8, 2 (2017): 82-86.
- **13.** Khanavi Mahnaz, Sajad Maadani, Behnaz Farahanikia, **Mahdieh Eftekhari**, Mohammad Sharifzadeh. "Effect of the methanolic extracts of different parts of Ferula assa-foetida on naloxone-induced withdrawal behavior in morphine-dependent mice." *Avicenna Journal of Phytomedicine* (2017): 1-11.
- **14.** Farid Ramezani, Khanavi Mahnaz, Shams Ardekani Mohammad Reza, Sellergren Börje, **Eftekhari Mahdieh**, Rastegar Hossein, Shekarchi Maryam. "Molecularly Imprinted

- Polymer of Colocynthin, An Effective Tool for Quality Control of Citrullus colocynthis Extracts." *Current drug discovery technologies* 14, no. 3 (2017): 169-180.
- **15.** Ostad Seyed Nasser, Afsaneh Rajabi, Rahim Khademi, Fatemeh Farjadmand, **Mahdieh Eftekhari,** Abbas Hadjiakhoondi, Mahnaz Khanavi. "Cytotoxic Potential of Centaurea bruguierana ssp. belangerana: The MTT Assay." *Acta Medica Iranica* 54, no. 9 (2016): 583-589.
- **16.** N. Samadi, S. Shahani, H. Akbarzadeh, S. Mohammadi-Motamed, E. Safaripour, F. Farjadmand, **M. Eftekhari**, H.R. Monsef-Esfahani, M. Khanavi. Essential oil analysis and antibacterial activity of *Ferula assa-foetida* L. aerial parts from Neishabour mountains. Research Journal of Pharmacognosy (RJP) 3(3), 2016: 35-42
- **17.** Shekarchi, M., F. Ramezany, M. R. Shams Ardekani, M. Lamshöft, H. Rastegar, **M. Eftekhari,** M. Khanavi. "An improved HPLC method for determination of colocynthin in colocynth." *Res J Pharmacogn* 2, no. 4 (2015): 39-48.
- **18.** Hajhashemi, Valiollah, Mohsen Minaiyan, **Mahdieh Eftekhari.** "Anti-Inflammatory activity of a selection of antidepressant drugs." *Iranian Journal of Pharmaceutical Sciences* 4, no. 3 (2008): 225-230.
- 19. Mahdieh Eftekhari, Mahnaz Khanavi, Mohsen Amin, Mahboubeh Mansourian, Mina Saeedi, Tahmineh Akbarzadeh, Mohammad Reza Shams Ardekani . Oliveria decumbens Vent.: Phytochemical study, anti-Helicobacter pylori and urease inhibitory activities, in vitro and in silico studies. Iranian Journal of Pharmaceutical Research, (Accepted).
- 20. Mahdieh eftekhari, Majid Balaei Kahnamoei; Fatemeh Oskou; Helia Abdshahzadeh; Mahboobe mansourian; Mohammad Reza Shams Ardekani; Mohammad Sohrabi; Tahmineh Akbarzadeh; Maliheh Safavi; Mahnaz khanavi, Chemical composition and cytotoxic activity of Diploschistes ocellatus (Vill.) Norman: a precious indigenous medicinal lichen in southwest of Iran. Natural Product Research. (under review).
- **21.** Arash Almasian, Farhood Najafi, **Mahdieh Eftekhari**, Mahnaz Khanavi, Preparation of Polyurethane/Pluronic F127 nanofibers containing Peppermint extract loaded gelatin nanoparticles for diabetic wounds healing: Characterization, in vitro and in vivo studies. Carbohydrate Polymers. (Submitted).
- 22. Shahrbanoo Fayazmanesh, Tayebeh Toliyat, Mahdieh Eftekhari, GholamrezaAmin,

Mannan hajimahmoodi, Mahnaz Khanavi^{*} "Preparation of vaginal suppository from *Punica granatum* L. flower extract and its standardization". *Res J Pharmacogn*. (Submitted).

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Conference papers

- Mahdieh Eftekhari, Fatemeh Oskou, Helia Abdeshahzadeh, Herbal bio enhancer in Iranian traditional medicine. 8th National Congress on Medicinal Plants. April 2019. Tehran, Iran.
- 2. Mahdieh Eftekhari , Mohammad Reza Shams Ardekani ,Mahnaz Khanavi, Mohsen Amini . The effect of collection time on essential oil of *Oliveria decumbens Vent.*1th Iranian Pharmacognosy congress 2017,Nov 29-30, Tehran, Iran.
- **3. Mahdieh Eftekhari**, Mohammad Reza Shams Ardekani, Mohammad Sohrabi, Gohar Baghbani, Mahnaz Khanavi. Ethnolichenology survey in Kohgiluyeh and Boyer-Ahmad province in Southwest of Iran. 9th Natural Product Conference 2016. July 24-27, Copenhagen, Denmark.
- **4. Mahdieh Eftekhari**, Elahe Karimpour Razkenari, Mohammad Reza Shams Ardekani , Tahmineh Akbarzadeh, Mohsen Amini, Mahnaz Khanavi. Chemical composition and cytotoxic activity of Salvia macrosiphon Boiss. essential oil. 9th Natural Product Conference 2016. July 24-27, Copenhagen, Denmark.
- 5. Mahdieh Eftekhari, Mohammad Reza Shams Ardekani, Mahnaz Khanavi, Shabnam Faridfar, Afsaneh Hosseinsalari. Antioxidant capacity and total phenolic content of Salvia macrosiphon: The precious plant in Iranian traditional medicine.
 5th National Congress on Medicinal Plants. 18th and 19th of May 2016. Isfahan, Iran.
- **6.** Fatemeh Oskou, Zahra Tofighi, **Mahdieh Eftekhari**, Azad Rastgar. Biological investigations on an endangered species, *Dorema aucheri* from Kohgiluyeh And Boyer-Ahmad. 5th National Congress on Medicinal Plants. 18th and 19th of May 2016. Isfahan, Iran.
- 7. Mahdieh Eftekhari, Mohammad Reza Shams Ardekani ,Elahe Karimpour Razkenari, Mahnaz Khanavi. Investigation of_cytotoxic activity of precious medicinal plant, *Fritillaria imperialis I.* against cancer cell lines. 5th National

- Congress on Medicinal Plants. 18th and 19th of May 2016. Isfahan, Iran.
- **8.** Vazirian, Mehdi, Shabnam Faridfar, **Mahdieh Eftekhari.** ""Gharikon"/" Agharikon" a Valuable Medicinal Mushroom in Iranian Traditional Medicine." *Iranian journal of medical sciences* 41, no. 3 Suppl (2016): S34.
- **9. Mahdieh Eftekhari,** Mahnaz Khanavi , Mohsen Amini , Mohammad Reza Shams Ardekani , "Oliveria decumbens Vent." an endemic Iranian plant: Investigation of the ethnobotany and chemical composition .4th **Iranian Pharmaceutical Sciences** Congress 2015. 21-24 December, Tehran, Iran.
- 10. Mahdieh Eftekhari, Mohammad Reza Shams Ardekani, Mahnaz Khanavi, Mohammad Sohrabi, Afsaneh Hosseinsalari. Lichens: Introducing and Applications in Iranian Traditional Medicin. 4th Iranian Pharmaceutical Sciences Congress 2015. 21-24 December, Tehran, Iran.
- 11. Mahdieh Eftekhari, Mohammad Reza Shams Ardekani, Mahnaz Khanavi, Fateme Farjadmand. Antioxidant capacity and total phenolic content of precious, endemic Iranian plant: Oliveria decumbens Vent. 14th Iranian Pharmaceutical Sciences Congress 2015. 21-24 December, Tehran, Iran.

Research projects

- 1. Preparation of an antibacterial Nano fibrous wound dressing containing of medicinal herbs for the restoration of diabetic wounds
- 2. Phytochemical and biological investigation on a valuable lichen in folk medicine: *Diploschistes ocellatus*
- 3. Comparative study on cytotoxic activity of *Daphne mezereom* total extract and modified plant extract used in Iranian Traditional Medicine
- 4. Investigation of anti-acetylcholinesterase activity of isolated compounds from *Myristica fragrance*
- 5. In vitro study of anti-acetylcholinesterase and butyrylcholinesterase activities of isolated compounds from *Santalum album*
- 6. In vitro investigation of anti-Alzheimer effect of selected essential oil that recommended in Iranian medicine as brain tonic
- 7. Formulation of anti-Alzheimer drug based on Iranian traditional medicine
- 8. Phytochemical investigation and biological evaluation of the aerial parts of *Salvia macrosiphon* Boiss.

Thesis advisor

- 1. Evaluation of anti-gastric ulcer effect of Rosa damascene Mill. Flowers total extract (animal study)
- 2. Evaluation of effect of different extraction factors on the yield and antioxidant activity of Oregano total extract
- 3. Phytochemical screening and antioxidant activity of *Tragacantha fasciculifolia* (Boiss.) kuntze.
- 4. Analysis of essential oil of Oliveria decumbens Vent. and its anti-peptic ulcer effect (animal study)
- 5. Evaluation of anti-peptic ulcer effect of Oliveria decumbens Vent. total extract and different fractions (animal study)
- 6. Analysis of essential oil of *Carum copticum* and its anti-gastric ulcer effect (animal study)
- 7. Evaluation of anti-IBS effect of *Trachyspermum ammi* Linn. total extract (animal study)
- 8. Phytochemical investigation and cytotoxic effect of *Dorema aucheri* Boiss. aerial parts on different cell lines.
- 9. Isolation and identification of compounds of polar fractions of *Dorema aucheri* Boiss.
- 10. Phytochemical investigation and cytotoxic effect of *Arum conophaloides* aerial parts of
- 11. Phytochemical screening and antioxidant activity of *Arum rupicola Boiss*.
- 12. Evaluation of acute and sub-chronic toxicity of *Oliveria decumbens* Vent. total extract in oral dosage form
- 13. Comparative investigation of alcoholic and water extracts of three fungus, *Ganoderma* applanatum, *Ganoderma resinaceum and Ganoderma applanatum*, in the viewpoint of Activated Partial Thromboplastin Time and Prothrombine time.
- 14. Bioguided fractionation and isolation of acetylcholinesterase inhibitory compounds from aerial parts of *Sanguisorba minor*.
- 15. Preparation of topical analgesic formulation from *Lawsonia inermis* and *Ricinus communi* extracts.
- 16. Investigation of *Asarum europaeum as* Convoy Drugs in Iranian medicine on pharmacokinetic properties of vancomycin
- 17. Investigation of anti tyrosinase activity of different fractions of *Cassia angustifolia* and determination of their total phenol contents
- 18. Study on the relationship between traditional Iranian Pharmacy and European Pharmacy Based on medieval Translators' Opinions
- 19. Investigation of anti-cholinesterase activity of different fractions of *Myristica* fragrance

20. Identification and standardization of "Boore- Armani" as ingredient of Iranian traditional medicine formula

Membership and executive activities

- 1. Honorary member of the Academy of Medical sciences of Islamic Republic of Iran.
- 2. Member of Medical Council of Islamic Republic of Iran (IRIMC)
- 3. Honorary member of the Consultative Committee on Natural and Supplemental Medicines Food & Drug Organization of Islamic Republic of Iran, Tehran, Iran
- 4. Member of The Iranian Society of Pharmacognosy
- 5. Executive secretary of "Iranian traditional medicine series of seminars" in faculty of pharmacy, Tehran University of medical science
- 6. Cooperation in executive process of retraining courses for professional pharmacists
- 7. Cooperation in executive process of 1th Iranian Pharmacognosy congress 2017, Tehran, Iran.

Teaching Experience

- 1. Scientific lecturer on "Herbal medicine in gastrointestinal disorders", Retraining program for professional pharmacists, Tehran University of medical science.
- 2. Scientific lecturer on "Herbal medicine in skin disorders", Retraining program for professional pharmacists, Tehran University of medical science.
- 3. Scientific lecturer on "Herbal medicine in urologic disorders", Retraining program for professional pharmacists, Tehran University of medical science.
- 4. Teaching "Pharmacognosy course 1", (6 sections)