

Curriculum Vitae

Ladan Dayani



➤ Personal Information

First name: Ladan

Last name: Dayani

Gender: Female

Nationality: Iranian

Date of Birth: August 10, 1993

Place of Birth: Tehran, Iran

Occupation: Pharm. D & PhD of pharmaceuticals

Email: l.dayani@pharm.mui.ac.ir

Address: Department of Pharmaceutics, School of Pharmacy and Pharmaceutical sciences, Isfahan University of Medical Sciences, Isfahan, Iran

➤ Education/ Degree

1. Doctorate of pharmacy (Pharm. D), School of Pharmacy and Pharmaceutical Sciences, Isfahan University of Medical Sciences, Isfahan, Iran (2011-2017, GPA: 18.36 out of 20)
2. Doctorate of Pharmaceutics (PhD), School of Pharmacy and Pharmaceutical Sciences, Isfahan University of Medical Sciences, Isfahan, Iran (2017-2022, GPA: 18.02 out of 20)

➤ Thesis & Dissertation

1- Pharm. D Thesis

- **Title:** Nasal Delivery of Raloxifene Hydrochloride via Poly (Methyl Vinyl Ether Co-Maleic Acid) Nanoparticles and Evaluation its Effects on Ovariectomized Rats.

2- PhD Dissertation

- **Title:** Preparation of a Drug Delivery System of Cyclotides for Fingolimod Hydrochloride in Treatment of Multiple Sclerosis.

➤ Academic Honor and Awards

1. Ranked **141st** in “**National Entrance University Exam**” (2011)
2. First Place Position in Pharm. D training program, Isfahan University of Medical Sciences “**Outstanding Undergraduate Student and Class Valedictorian Award**” for **5 consequent years**.
3. The **3rd** position in “**National Pharmacy Basic Sciences Comprehensive Exam**”. (2013).
4. Participation in “20th Iranian Pharmacy Student’s Seminar”, Tehran, Iran, 2017 and **selected as the best poster presentation** entitled: Novel Electrospayed Nanoparticles for Enhanced Aqueous Solubility of Poorly Water-Soluble Raloxifene.
5. Ranked **1st** in “**National Ph.D. Entrance Exam**” (**Pharmaceutics**), among \approx 512 participants, 2017.
6. Member of Exceptional Talent Development Center, Isfahan University of Medical Sciences (EDC.mui.ac.ir, talented.mui.ac.ir), since 2011 to present.
7. Selected as an awarded member of “Iran's National Elites Foundation” in 2015,2016, 2017, 2020, 2021, 2022.
8. Selected as “talented pharmacy graduate student” by Iranian ‘s Pharmacists Association (2018).
9. Participation in “22nd Iranian Pharmacy Student’s Seminar”, Zanjan, Iran, 2019 and **selected as the best poster presentation** entitled: Poly (methyl vinyl ether-co-maleic acid) for Enhancement of Solubility, Oral Bioavailability and Anti-Osteoporotic Effects of Raloxifene Hydrochloride.
10. **Selected as the best researcher** between postgraduate students, Faculty of pharmacy, Isfahan University of Medical Sciences, 2022.

➤ **Professional/ Scientific Association Membership**

- 1- Member of Exceptional Talent Development Center, Isfahan University of Medical Sciences (EDC.mui.ac.ir, talented.mui.ac.ir), since 2011 to present.
- 2- Member of “PhD Students Advisory Council”, Educational Vice Chancellery, Isfahan University of Medical Sciences (2021-2022)
- 3- Member of “PhD Students Guild Council”, Cultural-Students Vice Chancellery, Isfahan University of Medical Sciences (2019-2021)
- 4- Member of Iranian Society of Nano medicine

- 5- Member of Iranian Physiology and Pharmacology Association
- 6- Member of Iranian Neuroscience Society
- 7- Member of Iranian Association for Cell and Tissue Culture
- 8- Member of Iranian Association of Pharmaceutical Scientists

➤ **Editorial Activities**

- **Collaboration as Reviewer with:**

- 1- Current Neuropharmacology (IF= 9.5)
- 2- Research in Pharmaceutical Sciences (Q1)
- 3- Advanced Biomedical Research

- **Conference Reviewer**

- 1- Contribution in reviewing the oral presentations and /or posters at 21st Iranian pharmacy student's seminar, Ahwaz, Iran, 2018.
- 2- Contribution in reviewing the oral presentations and /or posters at 22nd Iranian pharmacy student's seminar, Zanjan, Iran, 2019.
- 3- Reviewer, 2nd International Congress on Pharmacy Updates, Tehran, Iran, 2019
- 4- Contribution to the “pharmaceutics annual meeting of IPHSA”, 2022, Isfahan, Iran (as a scientific referee).

➤ **Congress and Conferences**

- 1- **Ladan Dayani**, Jaleh Varshosaz, Erfaneh Ghassami. Novel Electrosprayed Nanoparticles for Enhanced Aqueous Solubility of Poorly Water-Soluble Raloxifene. Participated as a poster presenter at “the 20th Iranian Pharmacy Student’s Seminar”, Tehran, Iran, 2017.
- 2- **Ladan Dayani**, Afsaneh Yegdaneh, Alireza Ghannadi. Chemical Constituents and Biological Activities of Two Iranian *Cystoseira* Species. Participated as a poster presenter at “the 20th Iranian Pharmacy Student’s Seminar”, Tehran, Iran, 2017.
- 3- **Ladan Dayani**, Jaleh Varshosaz, Mohsen Minaian. Novel Electrosprayed Nanoparticles for Enhanced Aqueous Solubility, Oral Bioavailability and Antiosteoporotic Effects of Poorly Water-Soluble Raloxifene Hydrochloride. Participation as oral presenter in “the 2nd International Congress on Pharmacy Updates”, Tehran, Iran, 2019.

- 4- **Ladan Dayani L**, Jaleh Varshosaz, Mohsen Minaiyan. Poly (methyl vinyl ether-co-maleic acid) for Enhancement of Solubility, Oral Bioavailability and Anti-Osteoporotic Effects of Raloxifene Hydrochloride. Participated as a poster presenter at “the 22nd Iranian Pharmacy Student’s Seminar”, Zanjan, Iran, 2019.
- 5- **Ladan Dayani**, Jaleh Varshosaz, Sana Pirmardvand Chegini, Mohsen Minaiyan. Fumed and Mesoporous Silica Nanoparticles for Enhanced Solubility and Oral Bioavailability of Raloxifene HCl. Participated as a poster presenter at “the 16th Iranian Pharmaceutical Sciences Congress (IPSC)”, Kermanshah, Iran, 2019.
- 6- Sajad Esmaeili S, Sina Maghsoudi, **Ladan Dayani**. Phytochemical Standardization, Formulation and Evaluation of Oral Hard Capsules from *Pinus eldarica* Bark Extract. Correspondence of the abstract presented at “the 3rd International Congress on Pharmacy Updates”, Tehran, Iran, 2020.
- 7- **Ladan Dayani**, Azade Taheri, Masoud Sadeghi Dinani, Hossein Hashempour. Cyclic peptide screening in Iranian *Viola odorata* extract. “the 4th International Conference on Agricultural Sciences, Medicinal Plants and Traditional Medicine”, Tbilisi, Georgia, 2021.
- 8- **Ladan Dayani**, Azade Taheri, Jaleh Varshosaz, Masoud Sadeghi Dinani, Mehdi Aliomrani, Hossein Hashempour. Effect of partially purified cyclotide rich fractions from *Viola odorata* on peripheral blood cells. Participated as poster presenter at “the 5th Annual TPCF Preclinical Imaging Symposium (TPIS)”, Tehran, Iran, 2022.
- 9- **Ladan Dayani**, Masoud Sadeghi Dinani, Mehdi Aliomrani, Hossein Hashempour, Jaleh Varshosaz, Azade Taheri. Evaluation of Neuroprotective effects of cyclotides extracted from *Viola odorata*. Participation as oral presenter “The 12th International Conference on Food Industry Science, Organic Agriculture and Food Security”, Poland, 2022.

➤ Skills

✓ Language Skills

Persian (Native)

English (Fluent)

✓ Computer Software Skills

1. Design Expert

2. Statistical analyzing software (Graphpad Prism, SPSS, Sigma plot, STATA)

3. Fiji Image J
4. Drawing software (Adobe Illustrator, Inkscape, Skitch)
5. Microsoft Office (Word, Power point, Excel, Publisher)
6. Reference managers (Mendeley, Endnote)
7. Plot Digitizer
8. Presentation software (Focusky, Aurora 3D presentation)
9. Using some windows based programs

✓ **Technical and Professional Skills**

1. Preparation and physicochemical evaluation of novel drug delivery systems (Peptide nanotubes, Electrospinning and electrospray, solid dispersion, micelle, nano-emulsion, Nano structured lipid carrier (NLC), Nanocrystals, ...)
2. Preparation and evaluation of different pharmaceutical dosage forms (capsule, ointment, cream, ...)
3. Screening key formulation parameters and optimization of formulation by statistical design of experiments (DOE)
4. Peptide self-assembly
5. High performance liquid chromatography (HPLC)
6. Rheological analysis
7. Texture analysis, Tensile-strength
8. UV-spectroscopy
9. Analysis of interfaces properties (surface tension, critical micelle concentration)
10. Critical association concentration (CAC) determination by fluorometry
11. Dynamic light scattering (DLS)
12. Fourier transform infrared spectroscopy (FTIR)
13. X-ray diffraction (XRD)
14. Thermal analysis (Differential scanning calorimetry (DSC), Thermogravimetric analysis (TGA)).
15. Systematic review (writing syntax for search in different scientific databases, data extraction, quality assessment and meta-analysis)
16. Drawing Graphical Abstracts and scientific medical Illustrations.

➤ **Workshop and Certificates**

1. Search, Medline, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran. (2013).
2. Pharmacotherapy of Diabetes, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran. (2015).
3. Electrospinning, Nano Jaber ibn Hayyan Institute, Isfahan, Iran. (2016).
4. Endnote, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran. (2016).

5. SPSS, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran. (2016).
6. Manufacturing Methods and synthesis of nanomaterials, Pasteur Institute of Iran, Tehran, Iran. (2016).
7. Advanced Search in medical database, Moein Institute, Tehran, Iran. (2017).
8. Introductory teaching method, Medical Education Development Center, Isfahan, Iran. (2017).
9. Peer-review, Medical Education Development Center, Isfahan, Iran. (2018).
10. HPLC, Student Research Assembly, Isfahan, Iran. (2018).
11. Excel, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran. (2018).
12. NMR, MS, IR, GC, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran. (2018).
13. HPLC, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran. (2018).
14. Endnote, Student Research Assembly, Isfahan, Iran. (2018).
15. Systematic review, Student Research Assembly, Isfahan, Iran. (2018).
16. Writing proposal, Student Research Assembly, Isfahan, Iran. (2018).
17. Prism, Student Research Assembly, Isfahan, Iran. (2018).
18. Theoretical provision of compounded drugs in pharmacy. Zanzan University of Medical Sciences, Zanzan, Iran. (2019).
19. Ethical principles of working with laboratory animals, Isfahan University of Medical Sciences, Isfahan, Iran. (2019).
20. Commercialization of pharmaceutical products, Isfahan University of Medical Sciences, Isfahan, Iran. (2019).
21. Microsoft Office (Word, Power point, Excel, Publisher), Isfahan University of Medical Sciences, Center for Students Excellence, Isfahan, Iran. (2019).
22. Water purification and Validation, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
23. Quality risk management (QRM), Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).

24. Advanced GMP, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
25. Stability tests of API and finished products, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
26. Design of Physicochemical/ Microbial laboratory and clean room, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
27. Product Quality Review (PQR), Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
28. Tablet coating, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
29. Microbial control of pharmaceutical products, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
30. In-Process Quality control (IPQC), Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
31. USP 43, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
32. Trouble shooting in HPLC, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2020).
33. An introduction of cosmetic Industry & Products, Surena Academy, Tehran University of Medical Sciences, Tehran, Iran. (2020).
34. Dermatology & Cosmetics School, Shakib Academy, Kerman University of Medical Sciences, Iran. (2020).
35. Formulation and evaluation of tablets and capsules, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2021).
36. Quality assurance (QA), Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2021).
37. Softgel formulation, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2021).
38. Qualification of systems and equipment, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2021).
39. Formulation of contemporaneous drugs, Surena Academy, Tehran University of Medical Sciences, Tehran, Iran. (2021).

40. Preparation of Cosmetic formulations, Ophogh Pharmed Institution, Shahid Beheshti University, Tehran, Iran. (2021).
41. Statistical analysis, Universal Scientific Education and Research Network, Tehran, Irna. (2021).
42. Introduction of food and drug administration and its role in health system, Iranian Pharmaceutical Students' Association, Isfahan, Iran. (2021).
43. Safety in laboratory, Isfahan University of Medical Sciences, Isfahan, Iran. (2019).

➤ **Projects**

- 1) **Title:** Mesoporous silica nanoparticles for increasing the water solubility and oral bioavailability of raloxifene.
 - **Grant:** National Institute for Medical Research Development (NIMAD), Iran.
 - **Year:** 2017
 - **Role:** Co-investigator
- 2) **Title:** Evaluation of the efficacy of thermosensitive hydrogel containing doxorubicin and paclitaxel in mice with breast cancer.
 - **Grant:** Isfahan University of Medical Sciences, Isfahan, Iran.
 - **Year:** 2018
 - **Role:** Principal- investigator
- 3) **Title:** Investigating the effect of ointment based on ostrich oil containing black seed, Senna leaf, Propolis, honey and beeswax on the severity of wounds in patients with 2nd degree leg ulcers.
 - **Grant:** Isfahan University of Medical Sciences, Isfahan, Iran.
 - **Year:** 2020
 - **Role:** Co-investigator
- 4) **Title:** Evaluation and pharmacokinetics of novel drug delivery systems used for treatment of multiple sclerosis: A systematic review and meta-analysis.
 - **Grant:** Isfahan University of Medical Sciences, Isfahan, Iran.
 - **Year:** 2021
 - **Role:** Co-investigator

- 5) **Title:** Evaluation and pharmacokinetics of novel drug delivery systems for treatment of: osteoporosis. A systematic study and meta-analysis.
- **Grant:** Isfahan University of Medical Sciences, Isfahan, Iran.
 - **Year:** 2021
 - **Role:** Co-investigator
- 6) **Title:** Preparation of paraben-free herbal lightening cream and evaluation of its physicochemical properties.
- **Grant:** Isfahan University of Medical Sciences, Isfahan, Iran.
 - **Year:** 2021
 - **Role:** Co-investigator
- 7) **Title:** Evaluation and pharmacokinetics of novel drug delivery systems containing iron chelators in the treatment of thalassemia and leishmaniasis: A systematic review and meta-analysis.
- **Grant:** Isfahan University of Medical Sciences, Isfahan, Iran.
 - **Year:** 2022
 - **Role:** Co-investigator
- 8) **Title:** Drug Delivery of Fingolimod Hydrochloride Using Cyclotides in Experimental Autoimmune Encephalomyelitis (EAE)-Induced Multiple Sclerosis Model in C57BL/6 Mice.
- **Grant:** Iran National Science Foundation (INSF)
 - **Year:** 2022
 - **Role:** Co-investigator

➤ **Publications**

✓ **Published articles (Peer-reviewed)**

- 1) Yegdaneh A, Ghannadi A, **Dayani L**. Chemical constituents and biological activities of two Iranian *Cystoseira species*. Research in Pharmaceutical Sciences, 2016; 11(4): 311-317. DOI: [10.4103/1735-5362.189307](https://doi.org/10.4103/1735-5362.189307).
- 2) Varshosaz J, Minaiyan M, **Dayani L**. Poly (methyl vinyl ether-co-maleic acid) for enhancement of solubility, oral bioavailability and anti- osteoporotic effects of raloxifene hydrochloride. European Journal of Pharmaceutical Sciences, 2018; 112:195-206. DOI: [10.1016/j.ejps.2017.11.026](https://doi.org/10.1016/j.ejps.2017.11.026).

- 3) Varshosaz J, **Dayani L**, Chegini S, Minayian M. Production of a new platform based on fumed and mesoporous silica nanoparticles for enhanced solubility and oral bioavailability of Raloxifene HCl. *IET Nanobiotechnology*. 2019; 13(4):392-399. DOI: 10.1049/iet-nbt.2018.5252.
- 4) Esmaeili S, **Dayani L**, Taheri A, Zolfaghari B. Phytochemical standardization, formulation and evaluation of oral hard gelatin capsules from *Pinus eldarica* bark extract. *Avicenna Journal of Phytomedicine*, 2021; 11(2): 168-179.
- 5) **Dayani L**, Dehghani M, Aghaei M, Taymouri S, Taheri A. Preparation and evaluation of targeted albumin lipid nanoparticles with lactobionic acid for targeted drug delivery of sorafenib in hepatocellular carcinoma. *Journal of Drug Delivery Science and Technology*, 2022; 69: 103-142. DOI: 10.1016/j.jddst.2022.103142.
- 6) **Dayani L**, Sadeghi Dinani M, Aliomrani M, Hashempour H, Varshosaz J, Taheri A. Immunomodulatory effects of cyclotides isolated from *Viola odorata* in an experimental autoimmune encephalomyelitis animal model of multiple sclerosis. *Multiple Sclerosis and Related Disorders*. 2022 Jun 10;64:103958. DOI: 10.1016/j.msard.2022.103958.
- 7) **Dayani L**, Varshosaz J, Aliomrani M, Dinani MS, Hashempour H, Taheri A. Morphological studies of self-assembled cyclotides extracted from *Viola odorata* as novel versatile platforms in biomedical applications. *Biomaterials Science*. 2022;10(18):5172-86. DOI: <https://doi.org/10.1039/D2BM00848C>.
- 8) **Dayani L**, Hashempour H, Varshosaz J, Aliomrani M, Sadeghi Dinani MS, Taheri A. Aqueous Self-assembly of Extracted Cyclotides from *Viola odorata* into Stable Supramolecular Structures. *Journal of Molecular Liquids*. 2023 Jan 6:121217.
- 9) **Dayani L**, Taheri A, Taymouri S, Bahri Najafi R, Esmaeilian F. Preparation and in vitro evaluation of Vancomycin loaded Montmorillonite-Sodium Alginate topical gel for wound infection. *Brazilian Journal of Pharmaceutical Sciences*. 2023 Jan 16;58.

➤ **Extracurricular Activities**

- **Philanthropy**

- 1- Academic Educational Consultant for Pharm. D students, Isfahan University of Medical Sciences, Isfahan, Iran, 2014, 2015.
- 2- Participating as a presenter in different workshops held by Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran, 2017-present.
- 3- Active member of Iranian Pharmaceutical Students' Association (IPHSA), 2019-present.

- **Experiences**

- 1- Manager of search workshop, Isfahan Medical Research Committee in faculty of pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran, October 2014.
- 2- Participating in Executive Committee in “1st Research Seminar” held in School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran, 2016.
- 3- Participating in the “First Combination Tournament of Clinical, Pharmacognosy and Pharmaceutics (GNOTICS)” as a member of scientific team, Iranian Pharmaceutical Students' Association, Isfahan, Iran, 2019.

- **Other activity**

Announcer of “Ritalin” magazine, Student Research Committee, School of Pharmacy, Isfahan University of Medical Sciences, Isfahan, Iran, (2021-2022).