

Curriculum vitae

Yasamin Pahlavan, MSc, PhD

**CEO of Teb Novin Salamat Behin Asa Company and Institute of Synapse-Medico-gene.
Biosensor Sciences and Technology Research Center, Digestive Diseases Research Center.
International Affairs, Health Technology Incubation Center, Ardabil University of Medical
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EDUCATION

Tabriz University of Medical Sciences, Tabriz, Iran

Philosophy Doctorate (PhD) in Molecular Medicine (Jan 2013-Sep 2019)

Thesis: Behcet's Disease, Autoimmune diseases and Survivin as Biomarker

Supervisor: Dr. Khalil Ansarin, Dr. Alireza Khabbazi

Advisors: Dr. Naser Samadi

Courses taken in the University: System Biology and Bioinformatics (3 credits), Epidemiology (4 credits), Human Genetics (3 credits), Molecular Bases of the Diseases (4 credits), Gene therapy (3 credits), Physiopathology (16 credits including Digestive system, Heart and Blood circulation, Endocrine and metabolism, pulmonary diseases, Renal diseases, infectious diseases, Hematopathology and Rheumatic diseases), Methods of Diseases Diagnosis (3 credits), Biochemistry of Proteins (2 credits), Immunology Focused in Autoimmune diseases(3 credits), Statistics (3 credits), Cell Signaling (3 credits), Gene Cloning and Biotechnology(4 credits).

Kerman University of Medical Sciences, Kerman, Iran

Master of Sciences in Medical Physiology (2007-2010)

Thesis: Antinociceptive effects, Opioids, Pain and Herbal Plants

Supervisor: Dr. Golamreza Sepehri, Dr. Vahid Sheibani

Advisors: Dr. Mohammadreza Afarinesh Khaki

Selected courses taken in the University:

Physiology (9 credits), Anatomy (5 credits), Histology (4 credits), Statistics (3 credits), Biology and biophysics (6 credits, Pharmacology (4 credits), Medical biochemistry (2 credits).

Shahid Beheshti University of Tehran, Tehran, Iran

Bachelor of Science Degree in Biology (2002-2006).

Thesis: Investigation and presentation the basic information of cytogenetics (karyotype) for Hordeum: H. spontaneum and H.vogar

Supervisor: Dr. Masood Sheidaie

FEILED OF INTRESTES

- Prognostic &Diagnostic and Therapeutic Biomarkers, Biosensors, Recombinant Proteins
- Molecular Mechanisms of Diseases: Autoimmune Diseases, Cancer and Infectious Diseases
- Entrepreneurship and commercialization of technological products

RESEARCH EXPERIENCE

- Design of a functional biosensor-based kit for screening and identifying interleukin-6 in patients with Behçet's disease
- Studied on different laboratory techniques based on molecular medicine and biotechnology approaches, Detecting Biomarkers and miRNAs
- Studied on the molecular mechanisms and pathophysiology of autoimmune diseases
- Investigated the anti-nociceptive effects of herbal plants focused on opioids and gabaergic receptors
- Studied on survivin as diagnostic and prognostic markers for Behcet's patients
- Investigated the role of survivin in resistance against apoptosis and autoimmune disease activity.
- Studied the impact of survivin gene expression on disease activity.
- Investigated several signaling pathways related to survivin function.
- Investigated the effectiveness of MiRNAs on Behcet's disease activity.
- Experienced in cell culture, cellular proliferation and apoptosis assays, flow cytometry, ELISA (enzyme-linked immunosorbant assay), Cell separation, RNA and DNA extraction, RT-PCR, Real time PCR, Western blot analysis, animal experimentation

SUPERVISION OF THESES AND DISSERTATIONS

As a thesis advisor and research supervisor, I have guided several medical and postgraduate students in advanced biomedical research projects. Selected theses under my supervision include:

- 1) **Title:** *Analysis of hTERT Gene Expression in Gastric Tissue of Patients with Helicobacter pylori Infection* **Student:** Mohammadreza Fasahati – M.D. Program **Role:** Thesis Co-Advisor
- 2) **Title:** *Evaluation of hTERT Promoter Methylation Status in Gastric Tissue Samples of Patients with Helicobacter pylori Infection* **Student:** Shahin Lali Sarab – M.D. Program **Role:** Thesis Co-Advisor
- 3) **Title:** *Investigation of miRNA Expression Changes Related to the Survivin Gene in Patients with Colorectal Cancer* **Student:** Dr. Morteza Farzollahpour – General Surgery Residency **Role:** Thesis Co-Advisor
- 4) **Title:** *Detection of Interleukin-6 in Clinical Samples of Behçet's Disease Patients Using Biosensor Technology* **Student:** Dr. Maryam Rashtbari – M.D. Program **Role:** Thesis Advisor
- 5) **Title:** *Expression Profiling and Molecular Network Analysis of the ADH1B Gene in Colorectal Cancer Patients Using Bioinformatics Approaches* **Student:** Dr. Nazanin Golbazzpour – M.D. Program **Role:** Thesis Advisor

- 6) **Title:** *Molecular Network Mapping of the hTERT Gene in Patients with Helicobacter pylori Infection and Gastric Adenocarcinoma* **Student:** Zeinab Mousavi – M.D. Program **Role:** Thesis Advisor
- 7) **Title:** *Identification of Molecular Networks Involved in Treatment Response and Drug Resistance in Breast Cancer Patients for Biosensor Design Applications* **Student:** Ali Safarzadeh – M.D. Program **Role:** Thesis Advisor
- 8) **Title:** *Determination of Biosensor Targets for Biomarker Detection in Blood Samples of Breast Cancer Patients* **Student:** Mehdi Mohammadzadeh Shahla – M.D. Program **Role:** Thesis Advisor
- 9) **Title:** *Identification of Key Genes and Signaling Pathways for Early Diagnosis of Colorectal Cancer Using Bioinformatics Approaches* **Student:** Ali Ezzati – M.D. Program **Role:** Thesis Advisor
- 10) **Title:** *Characterization of Helicobacter pylori Bacteria* **Student:** Mohammad Sadegh Sedighi – M.Sc. in Clinical Biochemistry **Role:** Thesis Advisor

TEACHING AND EMPLOYMENT HISTORY

- Responsible for Training and Commercialization of Technology Units, Deputy of Research and Technology, Ardabil University of Medical Sciences, 2022-23.
- Executive International expert, International Affairs, Deputy of Research and Technology, Ardabil University of Medical Sciences, 2020-25.
- Scientific and Executive reviewer expert for ISI Index, Impact Factor: 2.2. Journal of Advanced Pharmaceutical Bulletin (ABP), Tabriz University Medical Sciences (2017-25).
- Teaching in Scientific and Specialized Workshops all aspects of Research and Molecular Techniques(2013-25) (Primer Design (2019), Introduction of Databases and Primer Design (2018), Real time PCR, Graphpad Prism, Workshop on Scientific Writing, Reviewing Scientific Articles)
- Scientific and Executive reviewer expert for Journal of Ardabil University of Medical Sciences (JARUMS) (2010-2012).
- Teaching the courses including: Physiology, Pathophysiology, Pathology for MSc students of internal- Surgery Nursery, Midwifery and operational room technicians. Ardabil University of Medical Sciences (2010- now).
- Teaching the courses including: Physiology, Pathophysiology, Pathology for MSc students of internal- Surgery Nursery. Zanjan University of Medical Sciences (2012-2016).
- Teaching the courses including: Physiology (Laboratory) for students of medicine. Tabriz University of Medical Sciences (2008).
- Teaching the courses including: Physiology (Laboratory) for students of medicine. Kerman University of Medical Sciences (2007).
- Teaching the courses including: Biology, Microbiology and Health for students of Biology. Ardabil Payame Nour University (2011-2012).

- Researcher and Clinical Laboratory Expert, Molecular Laboratory of Tabriz, Iran, (2017-2019).

PRESENTATIONS

- **Yasamin Pahlavan**, Diagnostic Panel Screening of Gastric cancer, Clinical Oncology Congress, 2025. Tehran
- **Yasamin Pahlavan**, GolamReza Sepehri. Pharmacologic Effects of *Origanum Vulgare* Related to GABA_A Receptors. 13Th Iranian Pharmaceutical Sciences Conference, Esfahan, Iran. 2012
- **Yasamin Pahlavan**, GolamReza Sepehri. Possible involvement of the GABAergic system in analgesic effect of aqueous extract of *Origanum Vulgare* in male rats. Iranian Congress of Physiology and Pharmacology. Hamadan, Iran. 2011
- **Yasamin Pahlavan**, GolamReza Sepehri. Pharmacologic Effects OF *Origanum Vulgare*. National Conference on Medicinal Plants, *Kish, Iran. 2011*
- **Yasamin Pahlavan**. Determination of the effect of intraventricular injection of aqueous extract of *Origanum Vulgare* L. ssp. *viridis* on pain threshold in male rats. *Annual research congress of iranian medical sciences student. Sanandaj, Iran. 2008*
- **Yasamin Pahlavan**. Interaction article of opioid and antinociceptive effects of aqueous extract *Origanum Vulgare*. *Congress of Neurosciences, Golestan, Iran. 2010*
- **Yasamin Pahlavan**, Naser Ahmadi Asl. Effect of animal oil on blood lipid profile and passive avoidance learning in male rats. Iranian Congress of Physiology and Pharmacology, Tehran, Iran. 2008
- Mohammadreza Nasir Zadeh, Naser Ahmadi Asl, Vahhab Babapour, **Yasamin Pahlavan**. Effect of extract on spatial memory in ovariectomized rats. Iranian Congress of Physiology and Pharmacology, Tehran, Iran. 2008

PEER REVIEWED PAPERS

- Mohammad Reza Aslani, Alireza Moradi, Farzin Aslani, Mohammad Hossein Boskabady, **Yasamin Pahlavan**. Effect of *Zataria multiflora* supplementation on inflammatory markers (IL-2, IL-4, IL-5, IL-6, TNF-alpha, IL-8, IL-10, IFN-gamma, CRP, MCP-1, EGF, and VEGF): A systematic review and meta-analysis of randomized placebo-controlled trials. *Inflammopharmacology. 2025.*
- Faride Ranjbari, **Yasamin Pahlavan***, Seyed Hossein Khaleghinejad, Hamideh Imanzadeh, Maryam Saberi, Mehdi Fathi and Farzaneh Fathi. Localized Surface Plasmon Resonance (SPR) for Detection of Breast Cancer Biomarkers. *Frontiers in Medicine. 2025*
- AmirAhmad Arabzadeh, Morteza Farzollahpour, Mirsalim Seyedsadegi, Farhad Pourfarzi, Vadieh Ghodsinezhad, Helia Bandehagh, **Yasamin Pahlavan***. Expression level of miR-548aa in tissue samples of patients with colorectal cancer. *Molecular Biology Reports. 2025*

- Pari Karami, Taha Afsar, Danial Gholamin, **Yasamin Pahlavan**, Mohammad Johari-Ahar. Nanoparticles-based biosensor devices developed for point-of-care (POC) analyses of c-reactive protein (CRP) as the clinically important inflammatory biomarker. *Chemical Papers*.2024
- Omid Yeganeh, Elaheh Dalir Abdolahinia, Saeideh Razi Soofiyani, Elnaz Faghfuri, Abbas Shafie, **Yasamin Pahlavan***. Biosensors for autoimmune diseases. *Clinica Chimica Acta* 2024
- Reza Panahizadeh, Mohammadamin Vatankhah, Pourya Gholizadeh, Elnaz Faghfuri, **Yasamin Pahlavan**, Narges Soozangar, Kazem Nejati-Koshki. The roles of miR-383 as a diagnostic and prognostic biomarker in human cancers. *Gene Reports*.2024
- **Yasamin Pahlavan**, Omid Yeganeh, Vahid Asghariazar, Chiman Karami. Multi-epitope vaccine against SARS-CoV-2 targeting the spike RBD: an immunoinformatics approach. *Future Science OA*.2024
- Danial Gholamin, Pari Karami, **Yasamin Pahlavan**, Mohammad Johari-Ahar. Highly sensitive photoelectrochemical immunosensor for detecting cancer marker CA19-9 based on a new SnSe quantum dot. *Microchimica Acta*.2024
- Chiman Karami, Vahid Asghariazar, **Yasamin Pahlavan**, Kamyar Mazloum Jalali, Ahmad Tajemmiri, Mohammad Ghorbani Vanan, Elham Safarzadeh. Mutation interest in the receptor-binding domain of spike protein of severe acute respiratory syndrome coronavirus 2 in the Northwest of Iran. *Jundishapur Journal of Microbiology*.2023
- Amir Ahmad Arabzadeh, Elnaz Faghfuri, Saiedeh Razi Soofiyani, Elaheh Dalir Abdolahinia, Samaneh Siapush, Kazem Nejati-Koshki, Bita Shahrami, Vahid Asghariazar, **Yasamin Pahlavan***. Current and novel emerging medical therapies for peripheral artery disease: a literature review. *Advanced Pharmaceutical Bulletin*.2022
- Shahram Habibzadeh, Nastaran Hashemzadeh, Hananeh Baradaran, Saiedeh Razi Soofiyani, Golamreza Jadideslam, **Yasamin Pahlavan**. COVID-19: From the Molecular Mechanisms to Treatment. *Tanaffos*. 2022
- Mahdavi AM, Rahmanpour D, Dehgan M, **Pahlavan Yasamin**, Mahmoudi M, Khabbazi A. Cigarette smoking and risk of palindromic rheumatism: A propensity score matching analysis. *International immunopharmacology*. 2022 Jan 1;102:108378.
- Fouladi N, **Pahlavan Yasamin**, Asghariazar V, Molaei S, Negaresh M, Safarzadeh E. The sufficient vitamin D and albumin level have a protective effect on COVID-19 infection. *Archives of microbiology*. 2021 Oct;203 (8):5153-62.
- **Yasamin Pahlavan**, Alireza Khabbazi. Baculoviral inhibitor of apoptosis family of proteins repeat containing 5 gene methylation status in peripheral blood mononuclear cells and plasma survivin levels in patients with behcet's disease. *Arch Rheumatol* (2021);36
- **Yasamin Pahlavan**, Mina Mohammadi Nasr , Elaheh Dalir Abdolahinia , Zahra Pirdel , Saiedeh Razi Soofiyani , Samaneh Siahpoush , Kazem Nejati. Prominent roles of microRNA-142 in cancer. *Pathology - Research and Practice*. www.elsevier.com/locate/prp. 216 (22 Sep2020) 153220
- **Pahlavan Y**, Samadi N, Ansarin Kh, Khabbazi A. Phosphorylation modulates survivin function in Behcet's disease. *Adv Pharm Bull*, 2020, 10(2), 278-283

- **Pahlavan Y**, Kahroba H, Samadi N, Karimi A, Ansarin K, Khabbazi A. Survival modulatory role in autoimmune and autoinflammatory diseases. *Journal of cellular physiology*. 2019 April; 234(11). 1-11
- **Yasaman Pahlavan**, Gholamreza Sepehri, Vahid Sheibani, Mohammadreza Afarinesh Khaki, Morteza Gojazadeh, Bahare Pahlavan, Fereshteh Pahlavan Study the antinociceptive effect of intracerebroventricular injection of aqueous extract of *Origanum vulgare* leaves in rat: Possible involvement of opioid system. *Iranian journal of basic medical sciences*. 2013 Oct;16 (10):1109.
- Khaki MR, **Pahlavan Y***, Sepehri G, Sheibani V, Pahlavan B. Antinociceptive effect of aqueous extract of *origanum vulgare* l. in male rats: possible involvement of the GABAergic system. *Iranian journal of pharmaceutical research: IJPR*. 2013;12(2):407.
- Haghpanah T, Sheibani V, Afarinesh MR, Esmail Pour Bezenjani K, Hajzadeh MA, **Pahlavan Y**. The Role of NMDA Receptor on Spatial Learning and Memory Consolidation Rat Following Intra-Hippocampal Injection of Aqueous Extract of Leaves of *Origanum (Origanum Vulgare L. ssp. viridis)*. *Journal of Ardabil University of Medical Sciences*. 2012;12(4):354-62.
- Eftehad GH , Afshar-Ghahramani F , **Pahlavan Y** , Amani M. The Serum Levels of Endothelium Nitric Oxide Synthase in Positive Cases for *Helicobacter pylori* Stool Antigen. *Journal of Ardabil University of Medical Sciences*. 2012;12(5):7-15. (Full Text in Persian).
- Barak M, Pourfarzi F, Jirodi S, Rahimi G, **Pahlavan Y***. Etiology and Clinical Investigation of Nosocomial Infections at Ardabil Bou Ali Hospital during 2010. *Journal of Ardabil University of Medical Sciences*. 2012; 12(S1):33-39. (Full Text in Persian).
- Eftehad GH, Parastar N, **Pahlavan Y**, Amani M. Serum Level of Metalloproteinase in Patients Infected with *Helicobacter Pylori* in Ardabil. *J Ardabil Univ Med Sci*. 2012; 12(3): 230-238. (Full Text in Persian)
- Yasamin Pahlavan, Gholam Reza Sepehri, Mohammad Reza Afarinesh Khaki, Vahid Sheibani, Khadijeh Esmail Pour Bezenjani, Bahareh Pahlavan. Intervention of morphine and naloxone on analgesic effects of *Origanum vulgare* extract in male rat. *J Ardabil Univ Med Sci*. 2012
- **Pahlavan Y**, Sepehri G R, Afarinesh Khaki M R, Sheibani V, Esmail Pour Bezenjani K, Pahlavan B. Intervention of Morphine and Naloxone on Analgesic Effects of *Origanum vulgare* Extract in Male Rat. *J Ardabil Univ Med Sci*. 2011; 11 (2) :134-142
- Moradi A, Pahlavan B, Sadigi A, **Pahlavan Y**. Treatment of Comminuted Intra-Articular Distal Femur Fractures with Locking Condylar buttress Compression Plate . *J Ardabil Univ Med Sci*. 2012; 12 (1) :77-84

Authored and Translated Books

1. **From Genes to Genomes: Concepts and Applications of DNA Technology Authors:** Jeremy W. Dale, Malcolm von Schantz, Nick Plant **Edition:** 13th Edition, 2011
Translators: S.E. Enderami, R. Nasiri Mansour, G. Naderi, Z. Payandeh, S. Mazloomi, F. Jafari, **Yasamin Pahlavan**

2. **Biomarkers in Cancer Screening and Early Detection Translators:** Naser Samadi, H. Kahroba, Piroz Rahmanzadeh Garvy, **Yasamin Pahlavan Published:** 2017
3. **Abul K. Abbas Atlas of Cellular and Molecular Immunology, Editor and Scientific Supervisor:** **Yasamin Pahlavan Status:** Translated, 2025
4. **Roitt's Essential Immunology Atlas, Editor and Scientific Supervisor:** **Yasamin Pahlavan Status:** Translated, 2025

Authored Books:

1. **Molecular Medicine (Working Title) Author:** **Yasamin Pahlavan Status:** In progress
2. **The Role of Interferons in Molecular Medicine Author:** **Yasamin Pahlavan Status:** Published, 2022

Academic and Institutional Contributions

Over the past years, I have successfully led and contributed to a wide range of academic, strategic, and research initiatives at the university level, including:

- **Upgrading the university's scientific journal to Scopus indexing** as Scientific and Executive Expert of the University Journal, with consistent and ahead-of-schedule publication.
- **Developing the university's strategic plan**, and overseeing international affairs, education, and commercialization within the Health Technology Incubator Center.
- **Serving as scientific and executive secretary** for major academic events, including the **Top-Up Technology Bootcamp** and high-profile scientific panels.
- **Teaching specialized medical courses**, including Pathology, Histopathology, Physiology, Genetics, Histology, and Pathophysiology.
- **Active faculty member and research council representative** in the university's Biosensor and Gastroenterology Research Centers.
- **Publishing over 30 peer-reviewed scientific articles** affiliated with the university in reputable international journals.
- **Designing the university's internationalization roadmap (THE)**, organizing English language empowerment courses for faculty, weekly journal clubs, and seasonal academic schools (Summer, Autumn, Winter).
- **Authoring academic books, registering patents**, and serving as an active member of the university's Innovation and Knowledge-Based Committee, as well as a judge in regional student Olympiads.
- **Establishing, managing, and providing services for the university's Genomic Sample Bank**, supporting research and diagnostics.
- Member of the **Working Group for Curriculum Revision** of the Ph.D. Program in Molecular Medicine 2025
- Elected Alternate Board Member of Iranian Society of Molecular Medicine

PROFESSIONAL SOCIETY MEMBERSHIPS

- Elected to replace the members of the board of directors of the Iranian molecular medicine association
 - Member of Iranian Immunology and Allergy Association
 - Member of Iranian Pain Association
 - Member of Iranian Molecular Medicine Association
 - Member of Strategic Planning Team of Ardabil University of Medical Sciences and Research Deputy of Ardabil University of Medical Sciences(2011-2015)
 - Member of Iranian Society of Physiology and Pharmacology
 - Selected Member of Student Committee, Tabriz University of Medical Sciences (2017-2019)
 - Member of the Research Committee of Education development Office (EDC), Kerman University of Medical Sciences (2007-2010)
 - Member of the Journal Review Team in ISI Journal (Iranian journal of pharmacological research)

Job Related Skills

- Molecular Tests (PCR, Primer Design, Real time-PCR, DNA and RNA Extraction and purification)
- Biosensors, Recombinant Protein, Aptamer
- Epigenetics Tests (Methylation)
- Western Blot Analysis
- Cell and Tissue culture
- FACS (Flow cytometry)
- Cell cycle analysis
- Physiological tests (Stereotaxy, Tail Flick)
- Animal studies
- Medical plants
- Meta-analysis Studies, Systematic Review

Computer Skills

- Machine Learning and R programming Analysis and System Biology
- Graph Pad Prism software
- Bioinformatics studies (Genomics)
- Primer Designing
- Corel Software
- Microsoft Office (Word, Excel, PowerPoint)
- SPSS
- Roc Curve(Biomarker Analysis)

- Reference manager (End Note)
- Photoshop software
- Internet, Pubmed, Scopus, Web of Knowledge, Science Direct, INLM(Integrated National Library of Medicine)