Gholam Ali KARDAR (MSPH, PhD)

Professor of Molecular Genetics Immunology, Asthma & Allergy Research Institute; AND Department of Medical Biotechnology, SATiM; Tehran University of Medical Sciences; No. 62, Gharib St., Tehran, 14194, IRAN. Tel: +98 21 66907415, 66935855 (Ext. 121); Fax: +98 21 66428995; Cell phone: +98 912 019 9469, gakardar@tums.ac.ir, & gakardar@gmail.com, Webpage: https://cv.tums.ac.ir/en/cv/Gholamali_Kardar Linkedln: https://www.linkedin.com/in/gholam-ali-kardar-phd-805ab879/

EDUCATION

| PhD. | 2010 | Molecular Genetics | NIGEB, Iran |
|-------|------|--------------------|---|
| M.Sc. | 2001 | Medical Immunology | Tehran University of Medical Sciences, Iran |
| B.Sc. | 1995 | Zoology (Biology) | Tehran University, Iran |

AWARDS & HONORS

| National Research Festival on Medical Sciences Award; Distinctive, National Youth Talent, National Foundation Elite; | 2003 2007 |
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| 3. Tasnim Research Award; | 2016 |
| Visiting Professor, Immunology Department, University of Toronto; | 2018-2019 |
| 5. Outstanding professor, TUMS international affairs Award; | 2022 |

RESEARCH INTERESTS

- Cancer vaccines, Immunotherapy,
- Gene Therapy & genome editing
- Cell engineering
- Allergen characterization, Allergy vaccine, & Immunotherapy

PROFESSIONAL EXPERIENCES

- Antibody development
- Immunochemistry
- Cell and Tissue culture
- Molecular Cloning, & Genetic engineering
- Bioinformatics

- Statistical analysis [SPSS]
- Flow Cytometry
- Assay development
- Protein Engineering & vaccine design
- CRISPR technology

THESIS

M.Sc. of Immunology (2000): Study of cytokine profile and T-cell proliferative response in healthy responder and nonresponder Individual vaccinated with recombinant hepatitis B antigen. Score: 19.90 of 20; School of public health, Tehran University of Medical Sciences, Iran; Supervisor: **Dr. Shokri F.**

Ph.D. of Molecular Genetics (2010): Studying secretion of human coagulation factor VIII after amino acid substitutions in A1 domain based on site directed mutagenesis. Score: 19.75 of 20; Basic Sciences Dept., NIGEB, Iran; Supervisor: **Dr. Zomorodipour A.**



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| MEMBERSHIP IN PROFESSIONAL SOCIETIES | | | | | | |
|---|--|--|---------------|--|--|--|
| • | National Foundation Elite | 2007-present | | | | |
| • | Iranian Society of Immunolog | 2003- present | | | | |
| • | European Academy of Allergo | 2002- present | | | | |
| • | Iranian Cancer Association | | 2011- present | | | |
| • | TUMS genetic network | | 2022-present | | | |
| • | And other related academic societies | | | | | |
| SCIENTIFIC POSITION | | | | | | |
| • | Professor, Tehran University | 2023-present | | | | |
| • | Associate professor, Tehran U | 2018-2022 | | | | |
| • | Assistant professor, Tehran U | 2011-2017 | | | | |
| • | Visiting Professor; University of Toronto, Department of Immunology 2018-2019 | | | | | |
| • | International dean of Immuno | 2024-present | | | | |
| • | Instructor and Board member | 2004-2007 | | | | |
| JOURN | NAL EDITORIAL BOARD & REVI | EWER | | | | |
| • | member of several peer-reviewed journal's editorial board and reviewer | | | | | |
| TEACHING EXPERIENCES at Tehran University of Medical Sciences | | | | | | |
| • | Immunopathology Cancer biology and immunothera | MSc & PhD students of Immunology apy, Gene Therapy | 2015-present | | | |
| • | Genetic Engineering Molecular cloning approach, Veo | PhD students of Medical Biotechnology ctors, & Mutagenesis | 2011-present | | | |
| • | Vaccines Monoclonal and Recombinant A | PhD students of Medical Biotechnology ntibody, vaccine carriers, Adjuvants, Transgenic Animal | 2011-present | | | |
| • | Immunochemistry Immunoassy essentials, Immuno | MSc & PhD students of Medical Biotechnology chemical assays, FRET, Flowctyometery, | 2014-present | | | |
| • | Advanced Cell culture Primary & secondary cells cultur | MSc & PhD students of Medical Biotechnology ing, cell functional assays, 3D models | 2014-present | | | |
| • | Laboratory Animal Ethics, facilities, Principles Gove | MSc students of Medical Biotechnology erning the care and use | 2014-present | | | |

RECENT KEY PUBLICATIONS [Complete list]

Mehmandoostli Z, Dehghani Ashkezari M, Seifati SM, Sadeghi V, Falak R, **Kardar GA**. The Evaluation of the N-cadherin Promoter's ability to Block EMT by Specific Expression of Diphtheria Toxin in EMT-induced A549 Cell Lines. Iran J Allergy Asthma Immunol. 2024 Apr 7;23(2):220-230.

Yousefi-Najafabadi Z, Mehmandoostli Z, Asgari Y, Kaboli S, Falak R, **Kardar GA**. Reversing T Cell Exhaustion by Converting Membrane PD-1 to Its Soluble form in Jurkat Cells; Applying The CRISPR/Cas9 Exon Skipping Strategy. Cell J 2023 Sep ;25 (9): 633-644

Nejad Mohammadi, Fatemeh Nouri, Yazdan Asgari, Hemen Moradi-Sardareh, Mahnaz Sharafi-Kolkeshvandi, **Kardar GA**. The immunostimulant effects of the rice ragged stunt virus genome on the growth and metastasis of breast cancer in mouse model. International immunopharmacology 2023. 125(Pt A):111101.

Kardar GA, PhD

Paydari Rostami S, Moghare Dehkordi N, Asgari Y, Bolouri MR, Shayanfar N, Falak R, and **Kardar GA**. Competitive Effect of Overexpressed C-terminal of Snail-1 (CSnail) is a Promising Strategy in Control of the Growth and Metastasis of Melanoma Cells. Recent Pat Anticancer Drug Discov. 2023 in press.

Najafabadi ZY, Fanuel S, Falak R, Kaboli S, **Kardar GA**. The Trend of CRISPR-Based Technologies in COVID-19 Disease: Beyond Genome Editing. Mol Biotechnol. 2022 Jan 29:1-16.

Feng Y, Li C, Stewart J, Barbulescu P, Desivo NS, Álvarez-Quilón A, Pezo RC, Perera M, Chan K, Tong K, Mohamad-Ramshan R, Berru M, Nakib D, Li G, **Kardar GA**, ..., Alberto Martin. FAM72A antagonizes UNG2 to promote mutagenic uracil repair during antibody maturation. Nature. 2021 Dec; 600 (7888): 324-328

Sadeghi F, Kardar GA, Bolouri MR, Nasri F, Sadri M, Falak R. Overexpression of bHLH domain of HIF-1 failed to inhibit the HIF-1 transcriptional activity in hypoxia. Biol Res. 2020 Jun 5;53 (1): 25.

Soltanpour Gharibdousti F, Fazeli Delshad B, Falak R, Shayanfar N, Ganjalikhani Hakemi M, Andalib A, **Kardar GA**. Induction of humoral immune responses and inhibition of metastasis in mice by a VEGF peptide-based vaccine. Iran J Basic Med Sci. 2020 Apr;23 (4): 507-514.

CURRENT PROJECTS

- Evaluation of the inhibitory effects of HIF binding construct in the presence of prodrug and Thymidin Kinase enzyme on the metastasis of A549 and MCF7 tumor cells
- The change of PD-1 expression on peripheral T cells by CRISPR/Cas9 method
- Neoantigen based vaccine; An Immunotherapy approach
- T cell engineering for more effective in Adoptive T cell therapy
- In-vivo gene delivery bay advantage AAV particles

PROFESSIONAL REFEREES

Dr. Fazel Shokri, Professor at Tehran University of Medical Sciences, Tehran, Iran. +98 21 8895 3021, <u>fshokri@tums.ac.ir</u>

Dr. Mahmood Jeddi-Tehrani, Professor at Avecinna Research Institute, Tehran, Iran. +98 912 3279072, <u>mahjed@yahoo.com</u>

Dr. Pejman Soroosh, Vice president, Head of Immunology Discovery, AnaptysBio. San Diego, CA, US. +1 858 997 3864, <u>pejman49@gmail.com</u>