

Curriculum Vitae

1. Personal:

Family name: Sheikhi
First name: Abdolkarim
Gender: Male
Place of birth: Dezful, Khuzestan, Iran
Date of birth: Dec 22nd 1965
Marital status: Married

Academic standing:

Member of Academic Staff, Dept. of Immunology, Zanzan University of Medical Sciences, 1992-2002.
Assistant Professor, Dept. of Immunology, Zanzan University of Medical Sciences, 2002-2009.
Associate Professor, Dept. of Immunology, Zanzan University of Medical Sciences, 2009-2010.
Associate Professor, Dept. of Immunology, Dezful University of Medical Sciences, 2010-2016.
Full Professor, Dept. of Immunology, Dezful University of Medical Sciences, Dec 22nd 2016-now.

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2. Educational background:

B.Sc. in biological sciences from faculty of Science, Shahid Chamran University in 1989 Ahwaz, Iran.

M.Sc. in Medical Immunology from Faculty of Medical Sciences, Tarbiat Modarress University in 1992 Tehran, Iran.

Thesis of M.Sc: Natural Killer activity assay in cancerous patients and normal persons.

PhD in Medical Immunology from Faculty of Medicine, Shiraz University of Medical Sciences, 2002, Shiraz, Iran.

Thesis of PhD:

Study of the influence of soluble HLA molecules on NK cells: Quantity and role of sHLA in malignant peritoneal and pleural effusions.

3. Laboratory training courses:

1. Course number ACSX799 (Introduction to Animal Care) at Queen's University, Canada
2. Radiation Safety (Radioisotope safety in the Laboratory) at Queen's University, Canada
3. W.H.M.I.S (Workplace Hazardous Materials Information System) at Queen's University, Canada
4. RT-PCR (Molecular detection of Cancer) at Golestan UMSc, Gorgan, Iran
5. Laser Capture Micro-dissection (LCM) at Queen's University, Canada
6. Wet Lab Safety training at University Health Network, Toronto, Ontario, Canada

4. Working in the Cell Biology Department and Urology Department, Queen's university, Kingston, Ontario, Canada, for one and half year as Research assistant in years: 2004-2005, 2010, 2014

5. Working in the MHC Lab of Institut Fur Immunologie, Universitätsklinikum, Kiel, Germany, under supervision of Prof. Dr. med. Dieter Kabelitz on the establishment of long-term NK cells in humans and their interaction with soluble MHC class I molecules, LAK cell generation, Specific and non-specific CTLs generation for six months. Year 2000

6. Working in Department of Medical Oncology, VUmc University, Amsterdam, The Netherlands on Generation of Bi-specific Nanobodies against Tumor cell TAA antigen and NK cell Receptor. Years: 2018-2019

7. Lab establishment: Cell and Molecular Immunology (Cell Culture) Lab in Immunology Dept. , School of Medicine, Zanzan University of Medical Sciences, Zanzan, Iran, 2.11.2003

8. Clinic establishment: Autohemotherapy clinic in Ganjavian hospital, Dezful, Khuzestan, Iran

9. Infertility treatment (IVF) centre establishment in Ganjavian hospital, Dezful, Khuzestan, Iran

10. Head of Microbiology and Immunology Department at School of Medicine, Dezful University of Medical Sciences, Dezful, Iran.

11. Head of Cell and Molecular Immunology (Cell Culture) Lab in Immunology Dept., School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran.

12. Head of Immunology Society of Dezful Branch, School of Medicine, Dezful University of Medical Sciences, Dezful, Iran.

13. Member of research Committee of Iranian Society of Immunology.

14. Member of research Committee of Zanjan University of Medical Sciences

15. Editorial board member and reviewer of:

- 1. Archives of Medical Laboratory Sciences (AMLS)**
- 2. Iran Journal of Immunology and Allergy**
- 2. Asian Journal of Cell Biology**
- 3. International journal of Cancer Research**
- 4. Pakistan Journal of biological Sciences**
- 5. Research journal of Allergy**
- 6. Journal of Zanjan University of Medical Sciences**

16. Technical experiences: I am familiar with many of immunologic techniques including:

Laser Capture Microdissection

Lab. Animal Perfusion

Hybridoma technique for production of monoclonal antibody.

NK activity assay with K562 and U937 and ... target cells with Cr51 release, LDH and MTT tests.

T cell separation with Magnetic Cell Sorting (MACS) technique and Dynal beads.

NK cell separation with Magnetic Cell Sorting (MACS) technique and Dynal beads.

Cell culture techniques (work with a lot of various cell lines and hybridomas)

LAK cell production

Long-term culture of NK and LAK cells

Generation and long-term culture of Ag specific and non-specific CTLs.

RNA/DNA extraction

Polymerase Chain Reaction (PCR), RT-PCR

Enzyme-linked ImmunoSorbent Assay (ELISA)

SDS_PAGE

Immunoblotting (Western-Blotting)

Ion exchange chromatography

Frozen Section preparation

PAS staining for frozen and paraffin sections

Immunohistochemistry

Immunofluorescence

Immunoagglutination

Serum protein electrophoresis

SRID and DD immunoprecipitation
Immunoelectrophoresis
Serologic method of HLA typing
And etc...

17. Teaching experiences:

- Lecturer of some chapters of Infection Immunology of MSc students of Shiraz Univ. of Medical Sciences for 2 years.
- Lectures of some chapters of Immunology of Medical and Nursing students of Shiraz Univ. of medical sciences for 2 years.
- Lecturer of Immunology of Medical, Pharmacy, MSc of Biochemistry, MSc of Parasitology, MSc of Biotechnology, Nursing, Microbiology and Environmental health students of Zandjan univ. of medical sciences for 18 years.
- Lecturer of Immunology of Medical, Pharmacy, MSc of Biochemistry, MSc of Parasitology, MSc of Biotechnology, Nursing, Microbiology and Environmental health students of Ahwaz univ. of medical sciences for 3 years.
- Lecturer of Immunology of Medical, Laboratory Sciences and Nursing students of Dezful University of Medical Sciences for 7years.

18. Scientific society membership:

1. Research Group of Reproduction, Development & Sexual Function, Queen's university, Kingston, Ontario, Canada
2. Iran society for immunology and Allergy
3. European society of Immunology
4. Iran society of Lab Sciences

19. Supervisor of Students Theses:

Thesis supervision of : **two** students (residents) of internal medicine, **One** student (resident) of pediatric medicine, **twenty one** MSc students of Microbiology and Parasitology and **eight** students of medicine (GP).

20. Awards:

From **Tehran University of Medical Sciences** to work on: Study of autologous LAK cell killing activity against autologous tumor cells in Upper Gastrointestinal malignant patients In vitro.

From **Shahed University of Medical Sciences** to work on: Study of Garlic extract's effect on RAGE expression and pro-inflammatory cytokines of PBMCs in patients with Diabetes Mellitus type II.

21. Bibliography:

1. Dinarvand N, Khanahmad H, Hakimian SM, **Sheikhi A**, Rashidi B, Pourfarzam M. Evaluation of long-chain acyl-coenzyme A synthetase 4 (ACSL4) expression in human breast cancer. *Res Pharm Sci.* 2020 Feb 20; 15(1):48-56.
2. Dinarvand N, Khanahmad H, Hakimian SM, **Sheikhi A**, Rashidi B, Bakhtiari H, Pourfarzam M. Expression and clinicopathological significance of lipin-1 in human breast cancer and its association with p53 tumor suppressor gene. *J Cell Physiol.* **2020** Jan 22. doi: 10.1002/jcp.29523.
3. Shakurnia A, **Sheikhi A**, Mirzapour M, et al. Sugarcane molasses enhances TGF- β secretion and FOXP3 gene expression by *Bifidobacterium Animalis* Subsp. *Lactis* stimulated PBMCs of Ulcerative Colitis patients. *Complement Ther Med.* **2019** Dec;47:102210.
4. Sharifi M, Fasihi-Ramandi M, **Sheikhi A**, Moridnia A, Saneipour M. Apoptosis induction in acute promyelocytic leukemia cells through upregulation of *CEBPa* by miR-182 blockage. *Mol Biol Res Commun.* **2018** Mar;7(1):25-33.
5. Mard-Soltani M, Rasaee MJ, Khalili S, Sheikhi AK, Hedayati M, Ghaderi-Zefrehi H, Alasvand M. The Effect of Differentially Designed Fusion Proteins to Elicit Efficient Anti-human Thyroid Stimulating Hormone Immune Responses. *Iran J Allergy Asthma Immunol.* 2018 Apr;17(2):158-170.
6. M Mard-Soltani, MJ Rasaee, S Khalili, **AK Sheikhi**, M Hedayati, ELISA Based hTSH Assessment Using Two Sensitive and Specific Anti-hTSH Polyclonal Antibodies *International Journal of Chemical and Molecular Engineering* , **2018**; 12 (2), 67-71

7. Akbari, M., **Sheikhi, A.**, Darchin, M., (...), Yousefi, S., Kookhaei, P. Effects of coping skills training program on immune system and pain in breast cancer patients. *Koomesh* 2018,
8. **A. Sheikhi**, Z Ahmadi, M Askari Comparison of the Effect of Yoghurt Starter Bacteria and *Lactobacillus Bulgaricus* on Peripheral Blood Mononuclear Cells Activity of Ulcerative Colitis Patients *J Babol Univ Med Sci.*, **2018**, 20 (12), 13-20
9. FM Ghaleghazi, F Safari, N Baharifar, **A Sheikhi**, Investigating the Cytotoxic Effect of Chamomile Aqueous Extract on 4T1 and 47D Cells and Level of Caspase3 Protein in Breast Cancer Cells T-47D *World Family Medicine Journal*, **2018**, 16 (7), 62-67
10. Rafiei M, Kiani F, Sayehmiri F, Sayehmiri K, Sheikhi A, Zamanian Azodi M. Study of *Porphyromonas gingivalis* in periodontal diseases: A systematic review and meta-analysis. *Med J Islam Repub Iran*. 2017 Sep 12;31:62.
11. **Sheikhi A**, Jafarzadeh A. A new therapeutic potential for cancers: One CAR with 2 different engines! *Hum Vaccin Immunother*. 2017 Aug 3;13(8):1786-1788.
12. Saki F, **Sheikhi A**, Omrani GHR, Karimi H, Dabbaghmanesh MH, Mousavinasab SN. Evaluation of Bone Mineral Density in Children with Type I Diabetes Mellitus and Relationship to Serum Levels of Osteopontin. *Drug Res (Stuttg)*. 2017 Sep;67(9):527-533
13. **Sheikhi A**, Giti H, Heibor MR, Jafarzadeh A, Shakerian M, Baharifar N, Niruzad F, Moghaddam AS, Kokhaei P, Baghaeifar M. *Lactobacillus Delbrueckii* subsp. *Bulgaricus* Modulates the Secretion of Th1/Th2 and Treg Cell-Related Cytokines by PBMCs from Patients with Atopic Dermatitis. *Drug Res (Stuttg)*. 2017 Sep 12. doi: 10.1055/s-0043-117612.
14. Sharifi M, Moridnia A, Mortazavi D, Salehi M, Bagheri M, **Sheikhi A**. Kefir: a powerful probiotics with anticancer properties. *Med Oncol*. 2017 Sep 27;34(11):183. doi: 10.1007/s12032-017-1044-9. Review.

15. Ghaffari SA, Nemati M, Hajghani H, Ebrahimi H, **Sheikhi A**, Jafarzadeh A. Circulating concentrations of interleukin (IL)-17 in patients with multiple sclerosis: Evaluation of the effects of gender, treatment, disease patterns and IL-23 receptor gene polymorphisms. *Iran J Neurol*. 2017 Jan 5;16(1):15-25.
16. Mard-Soltani M, Rasaee MJ, **Sheikhi A**, Hedayati M. Eliciting an antibody response against a recombinant TSH containing fusion protein. *J Immunoassay Immunochem*. 2017;38(3):257-270.
17. A Sheikhi The Effect Of Garlic Extract's On Expression Of TNF- α And IFN γ By Peripheral Blood Mononuclear Cells Of Patients With Diabetes Mellitus Type Ii Admitted To Ganjavian Dezful ... *Iranian Journal of Diabetes and Metabolism* 16 (6), 331-338
18. **Abdolkarim Sheikhi**, Abdollah Jafarzadeh, Parviz Kokhaei, Mohammad Hojjat-Farsangi. Whole Tumor Cell Vaccine Adjuvants: Comparing IL-12 to IL-2 and IL-15. *Iran J Immunol*. 2016 Sep;13(3):148-66.
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20. **AbdolKarim Sheikhi**, Tooba Ghazanfari, Mohammadreza Jafar Rangchi, Vahideh Ghaaed, Hamid Karimi, Abdollah Jafarzadeh, Faranak Sharifi. Effects of garlic (*Allium Sativum*) extract on the expression-of receptor for advanced glycation end products and pro-inflammatory cytokines secretion in peripheral blood mononuclear cells from patients with type 2 diabetes mellitus. *Arch Med Lab Sci*. 2015;1(1):1-10
21. **Abdolkarim Sheikhi**, Mansour Shakerian, Hojjat Giti, Mohammad Baghaeifar, Abdollah Jafarzadeh, Vahideh Ghaed, Mohammad Reza Heibor, Narges Baharifar, Zahra Dadafarin, Gholamreza Bashirpour. Probiotic yogurt culture *Bifidobacterium animalis subsp. lactis BB-12 and Lactobacillus acidophilus LA-5* modulate the cytokine secretion by peripheral blood mononuclear cells from patients with ulcerative colitis. *Drug Res (Stuttg)*. 2016 Jun;66(6):300-5.

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23. Hossain Hajghani, Soosan Bagherzadeh, Hossain-Ali Ebrahimi, Arezu Khosravimashizi, Maryam Nemati, Motahereh Ghazizadeh, **Abdolkarim Sheikhi**, Abdollah Jafarzadeh. Investigation of the association of ccl22 gene polymorphism rs4359426 with multiple sclerosis. *Arch Med Lab Sci*. **2015**;1(2):45-50
24. Minaee K, Nemati M, Khosravimashizi A, Daneshvar H, Mohammadi MM, **Sheikhi A**, Ghaderi A, Jafarzadeh A. Evaluation of the circulating levels of IL-12 and IL-33 in patients with breast cancer: Influences of the tumor stages and cytokine gene polymorphisms. *Iran J Basic Med Sci* **2015**; 18: 1189-1198.
25. **Sheikhi A**, Razdar S, Rahmanpour H, Mousavinasab N, Ganji HB, Jafarzadeh A. Higher expression of HSP70 and LOX-1 in the placental tissues of pre-eclampsia pregnancies. *Clin Exp Hypertens*. **2015**; 37(2):128-35.
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28. **A. Sheikhi**, M Jalali, M Gholamian, S Jannati, N Mousavifar. Apoptotic spermatozoa removal by Magnetic Activated Cell Sorting improves the fertilization rate of couples treated with ICSI procedure. *Andrology*. **2013** Nov;1(6):845-9.
29. **A. Sheikhi**, K. Saadati, A. Jafarzadeh, H karimi, N. Mousavinasab Augmenting the Expression of NKp44 Molecule and the Natural Killer Activity in Peripheral Blood Mononuclear Cells from Patients with Malignant Colorectal Carcinoma. *Drug Res (Stuttg)*. 2014 Jun;64 (6):281-6. doi: 10.1055/s-0033-1358465. Epub 2013 Oct 23.
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32. M Akbari, A Alipur, H Zare & **AK Sheikhi**. The effectiveness of mindfulness based on stress reduction program on quality of life and pain in patients with breast cancer. *Journal of Applied Psychology*. 2014; 8, 1(29), 7-28
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43. **A Sheikhi**, Y Jaberi, A Esmaeilzadeh, M Khani, M Moosaefard, ... Captopril inhibits the production of tumor necrosis factor- α by human mononuclear cells in patients with congestive heart failure. *Pakistan Journal of Biological Sciences*, 2006, 10 (10), 397-403
44. Marianne J van den Heuvel, Kuemei Xie, Chandrakant Tayade, Crystal Peralta, Yuan Fang, S Leonard, Valdemar A, Paffaro Jr, **Abdol K Sheikhi**, Coral Murrant and B Anne Croy (2005) A review of trafficking and activation of uterine natural killer cells. *American Journal of Reproductive Immunology* 54, 322-331
45. **Sheikhi AK** and Croy BA (2005) Localization of uterine sympathetic nerves and natural killer cells during mouse pregnancy. *American Journal of Reproductive Immunology*, 53(6), 282-3 presented in 25th Anniversary Meeting of American Society for Reproductive Immunology
46. **Sheikhi AK**, Amirghofran Z. (2003), The generation of LAK cells and influence of two recombinant sHLA molecules on NK cell-mediated lysis of cells with different HLA class I expression. *Archives of Iranian Medicine*, 6(4) 282-288
47. **Sheikhi AK**, Amirghofran Z (2003), The influence of two recombinant sHLA molecules on NK cell-mediated lysis of cells with different HLA class I expression. *Immunology*, 2003 Dec 110 (sup1), 13-14
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54. **Sheikhi AK** (1987) AIDS researches in new stages . *Scientific & cultural Nashrieh Bayan* 6(1), 140-153

۵۵. عبدالخانی، سکینه، محمودی، حسن، شیخی، عبدالکریم، رعایایی اردکانی، محمد بررسی سطح ایمنی ناشی از واکسن ب. ث. ژ (BCG) در مقابل بیماری سل با استفاده از تست پوستی توبرکولین و پاسخ لنفوسیت‌ها به آنتی‌ژن‌های ب. ث. ژ در شرایط *In vitro* در دانش آموزان شهر شاور مجله علمی پزشکی جندی شاپور ۲۰۱۹، ۱۸ (۲)، ۲۰۵-۲۱۳