

CURRICULUM VITAE



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DATE OF BIRTH	4 th June 1967
NATIONALITY	Iranian
ACADEMIC RANK	PhD
EDUCATION	- B.Sc of Cellular and Molecular Biology from Science Faculty of Tehran University 1988-1993 - M.S.c of Immunobiology, Department of Pathobiology University of Guelph, Ontario, Canada 1999-2002 - PhD of Biomedicine in Immunology, Asthma & Allergy Research Institute (IAARI), TUMS 2012-2018

Publications:

1. Clinical Characterization and Mutation Analysis of 13 Iranian Ataxia Telangiectasia Patients: Introducing Two Novel Mutations. Mohsen Badalzadeh, Maryam Soleimani Bavani, **Zahra Alizadeh**, Milad Mirmoghtadaei, Leila Shakerian, Seiamak Bahram, Anne Molitor, Raphael Carapito, Leila Moradi, Anahita Razaghian, Raheleh Assari, Masoud Movahedi, Mansoureh Shariat, Massoud Houshmand, Laleh Habibi, Amir Ali Hamidieh, Mahmoud Reza Ashrafi, Mohammad Reza Fazlollahi, Zahra Pourpak. *IJAAI* 2025
2. Interferon therapy in alpha and Delta variants of SARS-CoV-2: The dichotomy between laboratory success and clinical realities. Atefe Alirezaee, Milad Mirmoghtadaei, Hanieh Heydarlou, Asiye Akbarian, **Zahra Alizadeh**. *Cytokine* 2025
3. Atopic March in a Case of Filaggrin Gene Mutation. Anahita Razaghian, Leila Moradi, Bahar Allahverdi, Maryam Khansari Asadabadi, **Zahra Alizadeh**, Raheleh Shokouhi Shoormasti, Mohammadreza Fazlollahi. *Pediatric Allergy, Immunology, and Pulmonology* 2025
4. Diverse Phenotypic Expressions of ADA2 Deficiency: Two Case Studies. Anahita Razaghian, **Zahra Alizadeh**, Isabelle Meyts, Arash Kalantari, Sahar Rostami Hir, Marjon Wouters, Mohammad Reza Fazlollahi. *IJAAI* 2025
5. Novel genotypes, phenotypes, and triggers in humans with OTULIN haploinsufficiency. Tristan J van der Linden, Rob JW Arts, Catherine M Biggs, Laleh Habibi, Laura Battle-Masó, Arjan van Laarhoven, Lisette M Scheepmaker, Pariya Yousefi, Andrea C Gómez-Raccio, **Zahra Alizadeh**, Catharina M Mulders-Manders, Jaap ten Oever, Janneke Schuurs-Hoeijmakers, Nasrin Alipour-Olyei, Anne Molitor, Daniela Di Giovanni, Raphael Carapito, Seiamak Bahram, Gisela Seminario, Liliana Bezrodnik, Mana Momenilandi, Mohammad Shahrooei, Jacinta Bustamante, Ivona Aksentijevich, Daniel L Kastner, Mohammad Reza Fazlollahi, Roger Colobran, Stuart E Turvey, Frank L van de Veerdonk, Jean-Laurent Casanova, Bertrand Boisson, Bart W Bardoel, Andrés N Spaan. *Journal of human immunity* 2025
6. Complications of the Bacillus Calmette-Guerin vaccine as an early warning sign of inborn errors of immunity: A report of 197 patients. Mohammad Reza Fazlollahi, Ali

- Goudarzi, Maryam Nourizadeh, **Zahra Alizadeh**, Shaghayegh Tajik, Mohsen Badalzadeh, Shokouh Azam sarafzade, Maryam Mahlooji Rad, Zeinab Adab, Leila Moradi, Anahita Razaghian, ,Nastaran Sabetkish, Zahra Pourpak*, Mostafa Moin. *Frontiers in Immunology* 2024
7. Shaghayegh Tajik, Mohammad Reza Fazlollahi, **Zahra Alizadeh**, Mohsen Badalzadeh¹, Massoud Houshmand, Anahita Razaghian¹, Seiamak Bahram, Anne Molitor, Raphael Carapito, Mansoureh Shariat, Amir Ali Hamidieh, Nasrin Behniafard, Babak Abdolkarimi, Tahereh Rostami, Mostafa Moin, Zahra Pourpak. Early Diagnosis of Immunodeficient Patients with Partial Albinism: The Role of Hair Study and Peripheral Blood Smear. *Pediatric Allergy & Immunology* 2024
8. **Zahra Alizadeh**, Mohsen Badalzadeh, Hanieh Heydarlou, Leila Shakerian, Maryam Mahlooji rad, Fariborz Zandieh, Mohammad Reza Fazlollahi. Purine Nucleoside Phosphorylase Deficiency in Two Unrelated Patient with Autoimmune Hemolytic Anemia and Eosinophilia (Introducing 2 Novel Mutations). *Archives of Iranian Medicine* 2023
9. **Zahra Alizadeh**, Mohammad Reza Fazlollahi, Marzieh Mazinani, Mohsen Badalzadeh, Hanieh Heydarlou, Raphael Carapito, Anne Molitor, Andrés Caballero Garcia de Oteyza, Michele Proietti, Maryam Soleimani Bavani, Mansoureh Shariat, Morteza Fallahpour, Masoud Movahedi, Leila Moradi, Bodo Grimbacher, Seiamak Bahram, Zahra Pourpak. Clinical, immunological and molecular findings of 8 patients with typical and atypical severe combined immunodeficiency: identification of 7 novel mutations by whole exome sequencing. *Genes & Immunity* 2023
10. Mohammad Reza Fazlollahi, Amir Ali Hamidieh, Leila Moradi, Raheleh Shokouhi Shoormati, Nastaran Sabetkish, Behnaz Esmaeili, Mohsen Badalzadeh, **Zahra Alizadeh**, Somayeh Shamlou, Masoud Movahedi, Maryam Mahloujirad, Anahita Razaghian, Saba Arshi, Mohammad Gharagozlou, Arash Kalantari, Mohammad Hassan Bemanian, Mojgan Safari, Marzieh Heidarzadeh Arani, Mohammad Nabavi, Nima Parvaneh, Mahnaz Sadeghi-Shabestari, Maryam Behfar, Nasrin Behniafard, Roya

- Sherkat, Javad Ahmadian Heris, Mansoureh Shariat, Roshanak Radmehr, Massoud Houshmand, Anoshirvan Kazemnejad, Anne Molitor, Raphael Carapito, Seiamak Bahram, Zahra Pourpak, Mostafa Moin. Clinical and immunological characteristics of 69 leukocyte adhesion deficiency-I patients. *Pediatric Allergy and Immunology*.2023
11. Elena Sindram, Andrés Caballero-Oteyza, Naoko Kogata, Shaina Chor Mei Huang, **Zahra Alizadeh**, Laura Gámez-Díaz, Mohammad Reza Fazlollahi, Xiao Peng, Bodo Grimbacher, Michael Way, Michele Proietti. ARPC5 deficiency leads to severe early-onset systemic inflammation and mortality. *Disease Models & Mechanisms*. 2023
 12. Shaghayegh Tajik, Mohsen Badalzadeh, Massoud Houshmand, **Zahra Alizadeh**, Leila Moradi, Amir Ali Hamidieh, Alireza Shafiei, Javad Ahmadiani Heris, Seiamak Bahram, Anne Molitor, Raphael Carapito, Mostafa Moin, Mohammad Reza Fazlollahi, Zahra Pourpak. Molecular findings and clinical manifestations of 18 Iranian children with Griscelli syndrome type 2: Two novel homozygote mutations in RAB27A gene in a patient. *Scandinavian Journal of Immunology*.2023
 13. Seyedeh Zalfa Modarresi, Shagayegh Tajik, Mohsen Badalzadeh, Mohammad Reza Fazlollahi, Massoud Houshmand, Marzieh Maddah, Zahra Alizadeh, Mohammad Nabavi, Nasrin Bazargan, Masoud Movahedi, Zahra Pourpak. The Risk of the Next Child Getting Affected by Chronic Granulomatous Disease in Families with at Least One Autosomal Recessive CGD Child. *Iranian Journal of Allergy, Asthma and Immunology*. 2023
 14. Monika I Linder, Yoko Mizoguchi, Sebastian Hesse, Gergely Csaba, Megumi Tatematsu, Marcin Łyszkiewicz, Natalia Ziętara, Tim Jeske, Maximilian Hastreiter, Meino Rohlf, Yanshan Liu, Piotr Grabowski, Kaarin Ahomaa, Daniela Maier-Begandt, Marko Schwestka, Vahid Pazhakh, Abdulsalam I Isiaku, Brenda Briones Miranda, Piers Blombery, Megumu K Saito, Ejona Rusha, **Zahra Alizadeh**, Zahra Pourpak, Masao Kobayashi, Nima Rezaei, Ekrem Unal, Fabian Hauck, Micha Drukker, Barbara Walzog, Juri Rappsilber, Ralf Zimmer, Graham J Lieschke, Christoph Klein. *Blood*. 2023
 15. Yanxin Fan, Marta Murgia, Monika I Linder, Yoko Mizoguchi, Cong Wang, Marcin Łyszkiewicz, Natalia Ziętara, Yanshan Liu, Stephanie Frenz, Gabriela Sciuccati, Armando Partida-Gaytan, **Zahra Alizadeh**, Nima Rezaei, Peter Rehling, Sven

- Dennerlein, Matthias Mann, Christoph Klein. HAX1-dependent control of mitochondrial proteostasis governs neutrophil granulocyte differentiation. *The Journal of Clinical Investigation*. 2022
16. Susan Nabilou, Fatemeh Pak, **Zahra Alizadeh**, Mohammad Reza Fazlollahi, Masoud Houshmand, Maryam Ayazi, Iraj Mohammadzadeh, Mohammad Hasan Bemanian, Abbas Fayezi, Mohammad Nabavi, Shiva Saghafi, Sajedah Mohammadian, Parviz Kokhaei, Mostafa Moin, Zahra Pourpak. Genetic Study of Hereditary Angioedema Type I and Type II (First Report from Iranian Patients: Describing Three New Mutations). *Immunological Investigations*. 2022
17. Leila Shakerian, Maryam Nourizadeh, Mohsen Badalzadeh, Mohammad Reza Fazlollahi, Raheleh Shokouhi Shoormasti, Shiva Saghafi, Behnaz Esmaeili, **Zahra Alizadeh**, Stephan Borte, Massoud Houshmand, Lennart Hammarström, Zahra Pourpak. Investigating the Variation of TREC/KREC in Combined Immunodeficiencies. *Iranian Journal of Allergy, Asthma and Immunology*. 2021
18. **Zahra Alizadeh**, Nastaran Keyhanian, Sara Ghaderkhani, Simin Dashti-Khavidaki, Raheleh Shokouhi Shoormasti, Zahra Pourpak. A Pilot Study on Controlling Coronavirus Disease 2019 (COVID-19) Inflammation Using Melatonin Supplement. *Iranian Journal of Allergy, Asthma and Immunology*. 2021
19. Sahar Rostami Hir, **Zahra Alizadeh**, Marzieh Mazinani, Maryam Mahlooji Rad, Mohammad Reza Fazlollahi, Anoushiravan Kazemnejad, Ahmad Zavaran Hosseini, Mostafa Moin. Exosomal MicroRNAs as Biomarkers in Allergic Asthma. *Iranian Journal of Allergy, Asthma and Immunology*. 2021
20. Partial albinism and immunodeficiency in patients with Hermansky-Pudlak Type II: Introducing 2 novel mutations. **Zahra Alizadeh**, Susan Nabilou, Marzieh Mazinani, Shaghayegh Tajik, Amir Ali Hamidieh, Masoud Houshmand, Mohammad Reza Fazlollahi, Zahra Pourpak. *Scandinavian Journal of Immunology*. 2021
21. Seyedeh Zalfa Modarresi, Nastaran Sabetkish, Mohsen Badalzadeh, Shaghayegh Tajik, Behnaz Esmaeili, Mohammad Reza Fazlollahi, Massoud Houshmand, Jaber Gharehdaghi, Shirin Niroomanesh, Fatemeh Rahimi Sherbaf, **Zahra Alizadeh**, Nazanin

- Khodayari Namini, Marzieh Maddah, Zahra Pourpak, Mostafa Moin. The Critical Role of Prenatal Genetic Study in Prevention of Primary Immunodeficiency in High-risk Families: The Largest Report of 107 Cases. Iranian Journal of Allergy, Asthma and Immunology. 2020
22. **Zahra Alizadeh**, Parisa Dashti, Marzieh Mazinani, Maryam Nourizadeh, Leila Shakerian, Shaghayegh Tajik, Masoud Movahedi, Setareh Mamishi, Zahra Pourpak, Mohammad Reza Fazlollahi. Clinical and Genetic Study of X-linked Agammaglobulinemia Patients (The Benefit of Early Diagnosis). Iranian Journal of Allergy, Asthma and Immunology. 2020
23. **Zahra Alizadeh**, Susan Nabilou, Marzieh Mazinani, Shaghayegh Tajik, Amir Ali Hamidieh, Masoud Houshmand, Mohammad Reza Fazlollahi, Zahra Pourpak. Partial albinism and immunodeficiency in patients with Hermansky-Pudlak Type II: Introducing 2 novel mutations. Scandinavian Journal of Immunology. 2020
24. **Alizadeh Z**, Mortaz E, Mazinani M, Fazlollahi MR, Heidarneshad H, Adcock I, Moin M. Asthma phenotypes and T-bet protein expression in cells treated with Fluticasone Furoate/Vilanterol. Pulm Pharmacol Ther. 2020
25. Mozghan Moharamoghli, Vahideh Hassan-Zadeh, Elahe Dolatshahi, **Zahra Alizadeh**, Ali Farazmand. The expression of GAS5, THRIL, and RMRP lncRNAs is increased in T cells of patients with rheumatoid arthritis. Clinical Rheumatology 2019
26. Zahra Atafar, Zahra Pourpak, Masud Yunesian, Mohammad Hossein Nicknam, Mohammad Sadegh Hassanvand, Narjes Soleimanifar, Shiva Saghafi, **Zahra Alizadeh**, Soheila Rezaei, Maryam Ghanbarian, Mohammad Ghanbari Ghoskhal, Alvaro R Osornio-Vargas, Kazem Naddafi. Proinflammatory effects of dust storm and thermal inversion particulate matter (PM10) on human peripheral blood mononuclear cells (PBMCs) in vitro: a comparative approach and analysis. Journal of Environmental Health Science and Engineering 2019 Jun
27. Alireza Mesdaghinia, Zahra Pourpak, Kazem Naddafi, Ramin Nabizadeh Nodehi, **Zahra Alizadeh**, Soheila Rezaei, Amir Mohammadi, Maryam Faraji. An in vitro

method to evaluate hemolysis of human red blood cells (RBCs) treated by airborne particulate matter (PM10). *MethodsX* 2019

28. Maryam Faraji, Zahra Pourpak, Kazem Naddafi, Ramin Nabizadeh Nodehi, Mohammad Hossein Nicknam, Mansour Shamsipour, Alvaro R Osornio-Vargas, Mohammad Sadegh Hassanvand, **Zahra Alizadeh**, Soheila Rezaei, Marzieh Mazinani, Narjes Soleimanifar, Alireza Mesdaghinia. Chemical composition of PM10 and its effect on in vitro hemolysis of human red blood cells (RBCs): a comparison study during dust storm and inversion. *Journal of Environmental Health Science and Engineering* 2019
29. Alireza Mesdaghinia Maryam Faraji, Ramin Nabizadeh Nodehi, Kazem Naddafi, Zahra Pourpak, **Zahra Alizadeh**, Soheila Rezaei. Cytotoxicity of airborne particulate matter (PM10) from dust storm and inversion conditions assessed by MTT assay. *Journal of Air Pollution and Health* 2018
30. Zahra Pourpak Maryam Nourizadeh, Leila Shakerian, Stephan Borte, Mohammadreza Fazlollahi, Mohsen Badalzadeh, Massoud Houshmand, **Zahra Alizadeh**, Hossein Dalili, Ali Rashidi-Nezhad, Anoshirvan Kazemnejad, Mostafa Moin, Lennart Hammarström. Newborn screening using TREC/KREC assay for severe T and B cell lymphopenia in Iran. *Scandinavian Journal of Immunology*. 2018
31. **Alizadeh Z**, Mazinani M, Houshmand M, Shakerian L, Nourizadeh M, Pourpak Z, Fazlollahi MR. Genetic Analysis of Patients with Two Different Types of Hyper IgM Syndrome. *Immunological Investigation*. 2018
32. **Alizadeh Z**, Mazinani M, Shakerian L, Nabavi M, Fazlollahi MR. DOCK2 Deficiency in a Patient with Hyper IgM Phenotype. *J Clin Immunol*. 2018
33. **Zahra Alizadeh¹**, Marzieh Mazinani¹, Esmaeil Mortaz , Mohammad Reza Fazlollahi, Ian Adcock, Mostafa Moin. Glucocorticoid Receptor Nuclear Translocation in CD4 T cells from Severe and Moderate Asthmatic Patients Treated with Fluticasone/Vilanterol. *Iran J Allergy Asthma Immunol*. 2018
34. Mohsen Badalzadeh, Shaghayegh Tajik, Mohammad Reza Fazlollahi, **Zahra Alizadeh**, Massoud Houshmand , Fatemeh Fattahi, Marzieh Maddah, Zeinab Adab, Massoud

- Movahedi³, Zahra Pourpak. Three novel Mutations in CYBA among 22 Iranians with Chronic Granulomatous Disease. *International Journal of Immunogenetics*. 2017
35. **Alizadeh Z**, Mortaz E, Adcock I, Moin M. Role of Epigenetics in the Pathogenesis of Asthma. *Iran J Allergy Asthma Immunol*. 2017
36. Taghizade Mortezaee F, Esmaeli B, Badalzadeh M, Ghadami M, Fazlollahi MR, **Alizadeh Z**, Hamidieh AA, Chavoshzadeh Z, Movahedi M, Heydarzadeh M, Sadeghi Shabestari M, Tavassoli M, Nabavi M, Nasiri Kalmarzi R, Pourpak Z. Investigation of ITGB2 gene in 12 new cases of leukocyte adhesion deficiency-type I revealed four novel mutations from Iran. *Archives of Iranian Medicine*. 2015
37. Soltani A, RahmatiRad S, Pourpak Z, **Alizadeh Z**, Saghafi S, HajiBeigi B, Zeidi M, Farazmand A. Polymorphisms and serum level of mannose-binding lectin: an Iranian survey. *Iranian Journal of Allergy, Asthma & Immunology*. 2014
38. Esmaeili B, Ghadami M, Fazlollahi MR, Niroomanesh S, Atarod L, Chavoshzadeh Z, Moradi Z, **Alizadeh Z**, Pourpak Z. Prenatal diagnosis of leukocyte adhesion deficiency type-1 (five cases from Iran with two new mutations). *Iranian Journal of Allergy, Asthma & Immunology*. 2014
39. **Alizadeh Z**, Fazlollahi MR, Houshmand M, Maddah M, Chavoshzadeh Z, Hamidieh AA, Shamsian BS, Eshghi P, Bolandghamat Pour S, Sadaaie Jahromi H, Mansouri M, Movahedi M, Nayebpour M, Pourpak Z, Moin M. Different pattern of gene mutations in Iranian patients with severe congenital neutropenia (including 2 new mutations). *Iranian Journal of Allergy, Asthma & Immunology*. 2013
40. Salehi T, Fazlollahi MR, Maddah M, Nayebpour M, Tabatabaei Yazdi M, **Alizadeh Z**, Eshghi P, Chavoshzadeh Z, Movahedi M, Hamidieh AA, Cheraghi T, Pourpak Z, Moin M. Prevention and control of infections in patients with severe congenital neutropenia; a follow up study.. *Iranian Journal of Allergy, Asthma & Immunology*. 2012
41. **Alizadeh Z**, Fazlollahi M, Eshghi P, Hamidieh A, Ghadami M, Pourpak Z, Moin M. Two cases of Syndromic Neutropenia with a Report of Novel Mutation in G6PC3. *Iranian Journal of Allergy, Asthma & Immunology*. 2011; 10(3):227-230
42. **Alizadeh z**, Karrow N, Mallard BA. Biological effect of varying peptide binding affinity to the BoLA-DRB3*2703 allele. *Genet Sel Evol*. 2003

Submitted Manuscripts

1. Covid-19 Risk and Outcomes in Patients with Atopic Dermatitis: A Systematics Review and Meta-Analysis. Atefe Alirezaee, Milad Mirmoghtadaei, **Zahra Alizadeh**, Sahar Rostami, Mohammad Reza Fazlollahi, Rahelleh Shoukahi Shoormasti, Zahra Pourpak. *Experimental Dermatology*

Abstracts:

1. **Zahra Alizadeh**, Mohammad Reza Fazlollahi, Atefe Alirezaee, Anahita Razaghian, Leila Moradi, Milad Mirmoghtadaei, Arezou Karamzade, Mahdiyeh Movahedi, Mohammad Nabavi, Iraj Mohammadzadeh, Mohammad Hassan Bemanian, Masoud Movahedi, Zahra Pourpak, Genetic Study of Hereditary Angioedema Type I and Type II in Iranian Patients. (2024 HAEi Global Leadership Workshop and the ACARE Global Angioedema Forum 2024 Copenhagen)
2. **Zahra Alizadeh**, Anne Molitor, Mohammad Reza Fazlollahi, Raphael Carapito, Hanieh Heydarlou, Leila Moradi, Seiamak Bahram, Zahra Pourpak. Clinical, Immunological, and Genetic Features of 11 Patients with Chronic Mucocutaneous Candidiasis. International Union of Immunology 2023 (IUIS2023 Cape Town)
3. Sebastian Hesse, Christoph Klein, Rappsilber Juri, Yoko Mizoguchi, Monika Linder, Piotr Grabowski, **Zahra Alizadeh**, Zahra Pourpak, Nima Rezaei, Sorin Iurian, Ekrem Unal, Fabian Hauck, Ralf Zimmer, Gergely Csaba. Machine Learning Unveils Proteotypic Mimicry in Genetically Defined SCN Variants. *Blood*, The Journal of the American Society of Hematology, 2019
4. **Zahra Alizadeh**, soosan Nabilou Deshiry, Marzieh Mazinani, Masoud Housmand, Zahra Pourpak. Genetic diagnosis of two patients with Hermansky pudlak syndrome type2 in Iran. ESID in Edinburgh (UK), 11-14 September, 2017

5. Alizadeh Z¹, Mazinani M¹, Nabavi M², Fazlollahi MR¹, Houshmand M³, , Pourpak Z¹. DOCK2 Deficiency in One Iranian Patient. Conference: Meeting of the European-Academy-of-Allergy-and-Clinical-Immunology Location: Helsinki, FINLAND Date:JUN 17-21,2017
6. Nabilou S, Pak F, **Alizadeh Z**, Fazlollahi MR, Houshmand M, Movahedi M, Mohammadzadeh I, Nabavi M, Fayezi A, Mahdavian SA, Heidarzadeh M, Ghaffari J, Ayazi M, Saghafi S, Mohammadian S, Kokhaei P, Moin M, Pourpak Z, Genetic Diagnosis of Hereditary Angioedema Type I in Iran(Introducing One New Mutation),The third International Congress of Immunology,Asthma and Allergy (ICIAAI), February 15-17,2017
7. Bani, Jamali E.; Mazinani, M.; **Alizadeh, Z.**; et al. Genetic analysis of two different types of HIGM patients. Conference: Meeting of the European-Academy-of-Allergy-and-Clinical-Immunology Location: Vienna, AUSTRIA Date: JUN 11-15, 2016
8. **Alizadeh z**^{1*}, Dashti P¹, Tajik S¹, Chavoshzadeh Z², Movahedi M³, Fazlollahi M¹, Pourpak Z¹. Case report of: genetic analysis of patients with X-linked agammaglobulinemia in Iran. EAACI Congress 2016, to be Vienna, Austria, 11-15 June 2016
9. Nabilou S MSc Student*, **Alizadeh Z** PhD Student, Fazlollahi MR MD, Mohammadzadeh I MD, Houshmand M PhD, Kukhaee P PhD, Pak F PhD, Pourpak Z MD,PhD, Genetic diagnosis of Hereditary Angioedema disease in Iran (three cases report in a family), 13th International Congress of Immunology and Allergy of Iran, Tabriz, 26-29 April 2016
10. Deshiry Nabilou S.; **Alizadeh, Z.**; Fazlollahi, M. R.; et al. Genetic diagnosis of hereditary angioedema type I in Iran (introducing three new mutations). Conference: Meeting of the European-Academy-of-Allergy-and-Clinical-Immunology Location: Vienna, AUSTRIA Date: JUN 11-15, 2016 Sponsor(s): European Acad Allergy & Clin Immunol (**Granted**)
11. **Alizadeh, Z.**; Dashti, P.; Tajik, S.; et al. Case report of: genetic analysis of patients with X-linked agammaglobulinemia in Iran. Conference: Meeting of the European-Academy-

of-Allergy-and-Clinical-Immunology Location: Vienna, AUSTRIA Date: JUN 11-15, 2016

12. Banijamali, S. E.; **Alizadeh, Z.**; Fazlollahi, M. R.; et al. Molecular Studies of Different Types of HIGM Patients. Conference: 16th Biennial Meeting of the European-Society-for-Immunodeficiencies Location: Prague, CZECH REPUBLIC Date: OCT 29-NOV 01, 2014
13. **Alizadeh Z**, Dr. Fazlollahi M · Dr. Eshghi P , Dr. Hamidieh A , Ghadami M , Pourpak Z , Moin M . Two cases of Syndromic Neutropenia Including a Novel Mutation in G6PC3. (Abstract & poster presentation) ESID 2011
14. **Alizadeh Z** , Salehi T, Pourpak Z ,Fazlollahi M, Chavoshzadeh Z, Bemanian M, Shamsian B, Mahdavian A, Houshmand M, Moin M. ELA2 and HAX1 Gene Mutations in Iranian Congenital neutropenic Patients..XIVth Meeting of ESID 2010
15. Tahmineh Salehi, Mohammad Reza Fazlollahi, Marzieh Maddah, Mohsen Nayebpour, **Zahra Alizadeh**, Peyman Eshghi, Zahra Chavoshzadeh, Masud Movahedi, Amir Ali Hamidieh, Taher Cheraghi, Zahra Pourpak, Mostafa Moin. Response to G-CSF and its side effects in patients with congenital neutropenia. XIVth Meeting of ESID 2010

Books:

1-Ali Farazmand, **Zahra Alizadeh**, Mahnaz Fatehi.

Genetics: Laboratory Investigation 12th edition, Thomas R.

Mertens, Robert L. Hammersmith, Prentice Hall, 2001.

Published by Iran University Press 1385.

۲- مصطفی معین و همکاران ۲۰۱۸
آسم پایه تا بالین ، ویراست دوم ، مرکز نشر دانشگاهی
۳- مصطفی معین و همکاران ۲۰۲۲
آلرژی (علوم پایه و بالین)

Membership, Office and Committee Assignment In Professional Societies

Iranian Asthma and Allergy Society member

European Society of Immunodeficiency (ESID)

Current and previous projects:

1. **Cooperator** Exploring the Relationship between CD177, Myeloperoxidase and Proteinase 3 Expression in Neutrophils, as well as Serum Interleukin-8 Levels in Asthma (2024-present)
2. **Coopeator** investigating the relationship between the expression levels of CD177, myeloperoxidase, and proteinase-3 in neutrophils and the serum level of interleukin-8 with chronic spontaneous urticaria (20-24-present)
3. **Executive manager and cooperator** Investigating the relationship between disease severity (based on guidelines) and mutations in SERP1G1 gene in Iranian patients with type 1 and type 2 hereditary angioedema referred to Immunology, Asthma and Allergy Research institute (2024-present)
4. **Executive manager and cooperator** Comparing Serum Acylcarnitines and Amino Acid Levels between Pediatric Patients with Uncontrolled or Partially Controlled Asthma, Controlled Asthma, and Healthy Individuals (2023-present)

5. **Executive manager and cooperator** Finding mutations in JAGN1, VPS45, SMARCD2, G-CSFR, HAX1 and GFI1, G6PC3, ELANE genes and unknown mutations in severe congenital neutropenia among patients referred to Immunology, Asthma and Allergy Research Institute (2021-2023)
6. **Executive manager and cooperator** Bioinformatic analysis and segregation study of PID patients in patients who referred to IAARI during past 7 years (2020)
7. **Executive manager and cooperator** Bioinformatic analysis and segregation study of patients with unknown (genetically) inherited angioedema produced by Next Generation Sequencing method referring to Immunology, Asthma and Allergy Research Center and registered in HAE registry (2020)
8. **Executive manager and cooperator** Analysis of WASP protein by flowcytometry in suspected patients to SCN and wiskott-aldrich syndrome (2020)

9. **Executive manager and cooperator** Detection of unknown gene mutations by NGS in severe CMC (Chronic Mucocutaneous Candidiasis) among patients referred to Immunology, Asthma and Allergy Research Institute
10. **Executive manager and cooperator** Studying of LYST gene Mutations in patients suffering from chediak higashi syndrome referred to Immunology, Asthma and Allergy Research Institute (IAARI)
11. **Executive manager and cooperator** Next Generation Sequencing in patients with combined immunodeficiency (2020)
12. Executive manager and cooperator of COVID-19 accepted and granted project” Inflammation control in patients with COVID-19 using melatonin supplement compare to controls referred to Imam Khomani Hospital” (2020) Accomplished
13. **Executive manager and cooperator** of NIMAD accepted and granted project “Study of mutations in SCID patients by NGS” (2018)
14. **Executive manager and cooperator** of NIMAD accepted and granted project “Study of mutations in SCID patients by NGS” (2017) Accomplished
15. **Executive manager and cooperator** of NIMAD accepted and granted project “Evaluation of plasma microRNAs in children and adult asthmatic patients” (2017) Accomplished

Cooperation in two joint PhD projects with public Health Faculty of TUMS:

16. Compare the effects of particulate matter and air pollution on PBMCs and hemolysis of red blood cells *in vitro*
17. Compare the effects of particulate matter and air pollution on IL-10, IL-1B, TNFa cytokines secretion in PBMCs *in vitro*

Consultant and cooperation in 4 joint MSc projects:

18. Detection of mutations in the C1INH (SERPING1) gene in Iranian patients with hereditary angioedema type I (Joint project with Semnan university of Medical Sciences) Accomplished

19. Detection of CARD9 mutations in CMCC patients (Joint with Azad university of Tnekabon) Accomplished
20. MBL2 exon2 polymorphism and it's relation to MBL serum level in Tehran population (Joint with Biology Faculty of Tehran University)Accomplished.
21. MBL2 promoter polymorphism and it's relation to MBL serum level in Tehran population (Joint with Biology Faculty of Tehran University)Accomplished
22. **Executive manager and director** of Epigenetic Modification In CD4 T cell cytokines in different Asthma Phenotypes (Accomplished)
23. **Executive manager and director** of Detection of mutations in the C1INH (SERPING1) gene in Iranian patients with hereditary angioedema type I and II (Accomplished)
24. **Executive manager and director** of the CARD9 and STAT1 mutations in CMCC patients (Accomplished)
25. **Executive manager and director** of studying of mutations in AID and CD40L genes in patients with Hyper IgM syndrome referred to IARRI (Accomplished)
26. **Executive manager and director** of studying of mutations in CD40 gene in patients with Hyper IgM syndrome referred to IARRI (Accomplished)
27. **Executive manager and director** of studying of mutations in JAGN1 and VPS45 genes among patients with severe congenital neutropenia referred to IAARI (Accomplished)
28. **Executive manager and director** of the “Detection of mutations in *ELA2*, in severe congenital neutropenia and cyclic neutropenia among patients referred to Immunology, Asthma and Allergy Research Center”(Accomplished).
29. **Executive manager and director** of the “Detection of mutations in *HAX1*, *G-CSFR*, *GFII* in severe congenital neutropenia among patients referred to Immunology, Asthma and Allergy Research Center”(Accomplished).
30. **Executive manager and director** of the “Detection of mutations in *G6PC3*, in severe congenital neutropenia among patients referred to Immunology, Asthma and Allergy Research Center”(Accomplished).

31. **Executive manager and director** of the “Mutations in *Btk* and *Tec* intron 1 polymorphism in patients with XLA referred to Immunology, Asthma & Allergy Research Institute”(Accomplished).
32. **Executive manager and director** of the “Study of AIRE mutations in patients with CMCC referred to Immunology, Asthma & Allergy Research Institute”(Accomplished).
33. **Executive manager and director** Biological effect of varying peptide binding affinity to the BoLA-DRB3*2703 allele (Msc thesis project)

Employment History and Executive Activities

1. March 2024-Present Executive Editor of Iranian Journal of Allergy, Asthma and Immunology (IJAAI)
2. **2008-202*** Experience as laboratory specialist in Genetics Laboratory, Immunology, Asthma and Allergy Research Institute, TUMS.
3. **2014- Present** Executive manager of Genetics Laboratory of Immunology, Asthma and Allergy Research Institute.
4. **2013-present** Reviewer of Iranian Journal of Allergy, Asthma and Immunology (IJAAI)
5. **2013-present** Reviewer of Iranian Journal of Medical Sciences
6. **2015-Present** Executive member of Research Committee of Immunology, Asthma and Allergy Research Institute.
7. **2016-Present** Executive member of Ethics Committee of Immunology, Asthma and Allergy Research Institute.
8. Member of Scientific Committee and Review Committee of The Third International Congress of Immunology, Asthma and Allergy , Tehran, Iran(2017)
9. Member of executive committee of The third International Congress of Immunology, Asthma and Allergy , Tehran, Iran(2017)
10. Member of executive committee in 12th International Congress of Immunolgy and Allegry, Tehran (2014)

11. Member of executive committee in the second International Congress of Immunology, Asthma and Allergy, Tehran(2013).
12. Member of executive committee of 14th Asthma Meeting (2011).
13. Member of executive committee of 3d Iranian Asthma Meeting, 17-19 November 2009.

Grants and Scholarships

1. Selected as the top researcher of the Immunology, Asthma and Allergy Research Center in 2020 and 2023
2. Selection as the top referee of Iranian Journal of Allergy, Asthma and Immunology (IJAAI) in 2019 and 2023
3. Recipient of International Union of Immunology 2023 (IUIS2023) for poster presentation entitled “Clinical, Immunological, and Genetic Features of 11 Patients with Chronic Mucocutaneous Candidiasis” (2023)
4. Recipient of COVID-19 grant from TUMS for “Inflammation Control in Patients With COVID-19 Using Melatonin Supplement Referred to Imam Khomeini Hospital” (2020)
5. Recipient of grant from TUMS for a systematic review “DNA Methylation in Asthma” (2017)
6. Recipient of grant from Iran Ministry of Health and Medical Education for an International Project (PhD Thesis) (part of expenses for PhD thesis paid) 2012

7. University Graduate Scholarship (University of Guelph, twice 1999-2001)

8. Dr. Casey Buizert Memorial Scholarship (University of Guelph 2001)

Professional Qualifications

Teaching and Training

2014-Present "Genetics' methods" as a section of Immunopathology course and Clinical Immunology course for MSc and PhD students in Immunology, IAARI/TUMS.

2014-Present- "Genetics ' methods and Primer design softwares" to International student, IAARI/TUMS.

2016 - 2023 " Epigenetics of Immunological diseases" as a section of Clinical Immunology Course for PhD students.

Participation in Conferences and Oral Presentation

1. Scientific committee, reviewer and participant in The Third International Congress of
2. Inflammation in Immunology, Asthma &Allergy Research Institute, Tehran, Iran
3. (2023)
4. Scientific committee, lecture presenter, reviewer and participant in The Second National Congress on Inflammation "Hyperinflammation in COVID-19" in Immunology, Asthma &Allergy Research Institute, Tehran, Iran Dec, 2020

5. Lecture presenter, reviewer and participant in The First International Congress on
6. Inflammation “Basic and Clinic” in Immunology, Asthma & Allergy Research Institute, Tehran, Iran Dec 2018
7. 3. Participant in The third International Congress of Immunology, Asthma and Allergy , Tehran, Iran 2017
8. Executive of Bioinformatics workshop in The third International Congress of Immunology, Asthma and Allergy , Tehran, Iran 2017
9. Presenter of Bioinformatics workshop in The third International Congress of Immunology, Asthma and Allergy , Tehran, Iran 2017
10. Participant in Genetherapy in primary Immunodeficiency in IAARI 2016
11. Participant in 16th Biennial meeting 2014 - Prague, Czech Republic
12. Participant in PID care in development 100th J Project meeting 2014-Antalya, Turkey
13. Participant in 8th Royan International Congress, Tehran, 5-7 Sep 2012
14. Participant in Immunogenetics in Primary Immunodeficiency diseases in Tehran (2012)
15. Participant in the 11th International Congress of Immunology and Allergy, Tehran, 26-29 April 2012
16. Oral presentation entitled “Genetic Diagnosis of Severe Congenital Neutropenia in the 11th International Congress of Immunology and Allergy, Tehran, 26-29 April 2012
17. Presenter of the Pedigree Scientific Drawing in IAARI, Oct 2012
18. Participant in 10th congress of Immunology and Allergy in Tehran 2010

Participation in Workshops

1. System Biology & R programming, GFan, July 2020
2. Mutation Effect, GFan, Jun-Aug 2020
3. Next Generation Sequencing Analysis and Clinical NGS, Gfan, Sep -Feb 2019.
4. Peer Reviewing and Critical Appraisal Workshop in the 3th International Congress of Immunology, Asthma and Allergy 15-16 Jan 2017

5. Patient and their Families Workshop: PID in the 3th International Congress of Immunology, Asthma and Allergy 15-16 Jan 2017
6. Application of HRM in Genetics and Epigenetics Studies, Iranian Molecular Medicine Network, Pasteur Institute, March 2016
7. Endnote Software Workshop in Immunology, Asthma and Allergy Research Institute, Feb and March 2016
8. Bioinformatic and Primer Design Workshop in Digestive Diseases Research Institute, TUMS, 22th and 23th of Jul 2015.
9. Cloning and RT- PCR Workshop in Digestive Diseases Research Institute, TUMS, 29-31 July 2015.
10. Real Time PCR workshop in Digestive Diseases Research Institute, TUMS, 5th and 6th Aug 2015.
11. Workshop on the Principal of Flowcytometry in Clinical Application, National Research Institute of Tuberculosis and Lung Diseases (NRITLD) with Collaboration of Utrecht University, March 2014
12. Medical Journalism Workshop in Immunology, Asthma and Allergy Research Institute, 11& 12th Dec 2013
13. Workshop entitled "How To Prepare and Present Good Scientific Talk" in the second International Congress of Immunology, Asthma and Allergy, 20th Feb 2013.
14. Statistical Methods in Medical Research (SPSS Software) in Immunology, Asthma and Allergy Research Institute, 23-24 Jan 2013
15. Systematic review Workshop in Tehran University of Medical Sciences, 15& 16 th Jul 2012.
16. Advanced Course in Immunology in International Congress of Immunology and Allergy(2012, Tehran) 23-26th April 2012.
17. Microarray Applications in Medicine 11th International Congress of Immunology and Allergy(2012, Tehran) 27th April 2012.
18. Advanced Search Workshop in Tehran University of Medical Sciences, 16th Sep 2012.
19. Scientific review Workshop in Tehran University of Medical Sciences, 7th and 8th July 2012.
20. Advanced Scientific Writing Workshop in Children Medical Center, 12 Feb 2009

Laboratory Skills:

- 1-Cell culture
- 2-Flow cytometry
- 3-Magnetic Cell Sorting
- 4-Affinity Chromatography and protein purification
- 5-Western Blotting
- 6-Enhanced chemiluminescence
- 7-SDS-PAGE
- 8-ELISA
- 9-PCR
- 10-Immunocytochemistry
- 12- Clinical NGS
- 13- Mutation effect

Computer Skills:

- 1-ICDL
- 2- Primer design software
- 3- Scion Image program
- 4-Dialign program
- 5-sequence analysis software
- 7-Blast software

8-Endnote

9-PYMOL

Google scholar link:

<https://scholar.google.com/citations?user=QWePSeMAAAAJ&hl=en>