University of Social Welfare and Rehabilitation Sciences
Ministry of Health and Medical Education

ITA	
Name: Niloofar Surname: Bazazzadegan	Specialty /Ph.D. Medical Genetics
Title/Degree: Ph.D in Medical Genetics.	Department of: Genetics Research Center, University of Social Welfare and Rehabilitation Sciences.

Research Interests: My skills and experiences are in human molecular and cellular genetics, molecular and cellular techniques and some bioinformatics tools. During my 20 years of expertise in Genetic research center, I have worked as a research scientist and member of many scientific projects focused on hearing loss, Alzheimer and intellectual disability.

Scopus Profile: https://www.scopus.com/authid/detail.uri?authorId=13203058500 Google Scholar Profile: https://scholar.google.com/citations?hl=en&user=Bw8wDmEAAAAJ	Updated: 1 March 2023

Personal Information	**Nationality: Iranian**
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Education

Date	Degree	Duration	Institution	Country/City	Major
Sep 2012- Dec 2017	PhD	5 years	Genetics Research Centre, University of Social Welfare and Rehabilitation Sciences	Tehran, Iran	Medical Genetics
Sep 2001- Jan 2004	MSc	3 years	Branch of Science and Research, Islamic Azad University	Tehran, Iran	Biology Science - Cellular and Molecular Biology
1994- July 1998	BSc	3.5 years	North Tehran branch, Islamic Azad University	Tehran, Iran	

Faculty member

Year	Position	Duration	Institution/Course	Location
December 2022	Assistant Professor		Genetics Research Centre, University of Social Welfare and Rehabilitation Sciences	

Field of Specialization

- One of the pivotal member (supervisor) of research team in different projects about hereditary hearing loss include non-syndromic, syndromic (Usher, Pendred) with autosomal recessive, autosomal dominant patterns of inheritance. Studies covered investigation of known and unknown loci (DFNB, DFNA) related to hearing loss by several molecular techniqes, linkage analysis, sequencing, and Next generation sequencing.
- Collaboration to intellectual disability projects by immortalizing of peripheral blood lymphocytes for functional study.
- Establishing lymphocyte immortalization in cell culture department in Genetics Research Center.
- Establishing cell bank website of Genetics Research Center
- One of the main member in hearing loss studies by linkage analysis in Genetics Research Center.
- Collaboration in Alzheimer disease studies in Genetics Research Center.

Language Ability

- Proficient in English to an acceptable level and also in the field of specialization
- Familiarity with French at the debutant level

Research Experience

Year	Position	Institution/Course	Location
2022-Now	Assistant professor	• Writing proposal and launching project • Genetics lab expert: Specialized supervision and control the performance of students who are working in the lab and training molecular techniques to new students (Ph.d and Master) • Writing and prepare papers • Teaching different courses • Reviewing research proposal • Reviewing papers • Superviser of cell culture department	Genetics Research Center (GRC), University of Social Welfare and Rehabilitation Sciences
2017- 2022	Research associate	• Genetics lab expert: Specialized supervision and control the performance of students who are working in the lab and training molecular techniques to new students (Ph.d and Master) • Writing and prepare papers • Teaching different courses • Reviewing research proposal • Reviewing papers • Superviser of cell culture department and fly lab	Genetics Research Center (GRC), University of Social Welfare and Rehabilitation Sciences
2012- 2017	Research assistant	• Superviser of cell culture department • Specialized supervision and control the performance of students who were working in cell culture department • Specialized supervision and control the performance of students who were working in the lab, training molecular techniques to new students (Ph.d and Master) • Establishing immortalized cell line (LCL) for MR patients as part of the Intelectual disability project	Genetics Research Center (GRC), University of Social Welfare and Rehabilitation Sciences

2007-2012	Research assistant	• Specialized supervision and control the performance of students who were working in the lab, training molecular techniques to new students (Ph.d and Master) • Specialized supervision and control the performance of students who were working on hearing loss projects • Collaboration in conducting research projects of the Genetics Research Center • Writing and prepare research projects and papers	Genetics Research Center (GRC), University of Social Welfare and Rehabilitation Sciences
2003-2007	Researcher	• Specialized supervision and control the performance of students who were working on the hearing loss projects • Collaboration in conducting research projects of the Genetics Research Center • Writing and prepare research projects and papers • Teaching molecular techniques to new students (Master student) • Involving in teaching- organizing of the workshop on molecular biology techniques	

Scientific Membership

Year	Association, Society	Location

Publications

More than 40 publications which some of them are listed below:

1. Niloofar Bazazzadegan, Seyedeh Sedigheh Abedini, Azita Azarkeivan, Susan Banihashemi, Nooshin Nikzat, Hossein Najmabadi & Maryam Neishabury, The Spectrum of HBB Mutations among 2315 Beta Thalassemia Patients of a Reference Clinic in Tehran-Iran. Hemoglobin, 2023, https://doi.org/10.1080/03630269.2023.2242787

2. Mohseni, M., Babanejad, M., Booth, K.T., Jamali P., Jalalvand KH.,Davarnia B., Ardalani F., Khoshaeen A., Arzhangi S., Ghodratpour F., Beheshtian M., Jahanshad F., Otukesh H., Bahrami F., Seifati SM., **Bazazzadegan N**., Habibi F.,Behravan H., Mirzaei S., Keshavarzi F., Nikzat N., Mehrjoo Z., Thiele H., Nothnagel M., Azaiez H., Smith RJH., Kahrizi, K., Najmabadi, H. Exome sequencing utility in defining the genetic landscape of hearing loss and novel-gene discovery in Iran. Clinical Genetics, 2021, 100(1), pp. 59–78.

3. Khoshbakht, S., Beheshtian, M., Fattahi, Z., **Bazazzadegan N**., Parsimehr E., Fadaee M., Vazehan R., Faraji Zonooz M., Abolhassani A., Makvand M., Kariminejad A., Celik, A., Kahrizi, K., Najmabadi, H..CEP104 and CEP290; Genes with ciliary functions cause intellectual disability in multiple families. Archives of Iranian Medicine, 2021, 24(5), pp. 364–373.

4. Babanejad M, Zarandy MM, Nikzat N, **Bazazzadegan N**, Arzhangi S, Mohseni M, Kahrizi K, Najmabadi H. G130V de novo mutation in an Iranian pedigree with nonsyndromic hearing loss without palmoplantar keratoderma. Int J Pediatr Otorhinolaryngol.

2019 Jul 26;126:109607. doi: 10.1016/j.ijporl.2019.109607. [Epub ahead of print] PubMed PMID: 31419744.

5. **Niloofar Bazazzadegan**, Raheleh Vazehan, Mahsa Fadaee, Zohreh Fattahi, Ayda Abolhassani, Elham Parsimehr, Zahra Kalhor, Mehrshid Faraji Zonooz, Fatemeh Ahangari, Shima Dehdahsi, Farshide Samiee, Payman Jamali, Haleh Habibi, Younes Nourizadeh, Shokouh Mahdavi, Maryam Beheshtian, Ariana Kariminejad, Richard J H Smith, Hossein Najmabadi. Brief report of variants detected in hereditary hearing loss cases in Iran over a 3-year period. Iran J Public Health, Oct 2019, 48; 10: 1910-1915.

6. Kazeminasab S, Taskiran II, Fattahi Z, **Bazazzadegan N**, Hosseini M, Rahimi M, Oladnabi M, Haddadi M, Celik A, Ropers HH, Najmabadi H, Kahrizi K. CNKSR1 gene defect can cause syndromic autosomal recessive intellectual disability. Am J Med Genet B Neuropsychiatr Genet. 2018 Dec;177(8):691-699. doi: 10.1002/ajmg.b.32648. Epub 2018 Nov 18.

7. Maryam Rahimi, Farkhondeh Behjati, Nazanin Taheri, Shadi Hosseini, Hamid Reza Khorram Khorshid, Fatemeh Aghakhani Moghaddam, Masoud Karimlou, Saghar Ghasemi, **Niloofar Bazazzadegan**, Fereidiin Sirati, Elahe Keyhani. Correlation between important genes of mTOR pathway (PI3K and KIT) in Iranian women with sporadic breast cancer. Medical Journal of the Islamic Republic of Iran. 2018 Dec 31;32:135. doi: 10.14196/mjiri.32.135. eCollection 2018. PubMed PMID: 30815430; PubMed Central PMCID: PMC6387810.

8. **Bazazzadegan N**, Dehghan Shasaltaneh M, Saliminejad K, Kamali K, Banan M, Nazari R, Riazi GH, Khorram Khorshid HR. Effects of Ectoine on Behavior and Candidate Genes Expression in ICV-STZ Rat Model of Sporadic Alzheimer's Disease. Adv Pharm Bull. 2017 Dec;7(4):629-636. doi: 0.15171/apb.2017.075. Epub 2017 Dec 5.

9. **Bazazzadegan N**, Dehghan Shasaltaneh M, Saliminejad K, Kamali K, Banan M, Khorram Khorshid HR. Effects of Herbal Compound (IMOD) on Behavior and Expression of Alzheimer's Disease Related Genes in Streptozotocin-Rat Model of Sporadic Alzheimer's Disease. Adv Pharm Bull. 2017 Sep;7(3):491-494. doi: 10.15171/apb.2017.060. Epub 2017 Sep 25.

10. **Bazazzadegan N**, Dehghan Shasaltaneh M, Saliminejad K, Kamali K, Banan M, Khorram Khorshid HR. The Effects of Melilotus officinalis Extract on Expression of Daxx, Nfkb and Vegf Genes in the Streptozotocin-Induced Rat Model of Sporadic Alzheimer's Disease. Avicenna J Med Biotechnol. 2017 Jul-Sep;9(3):133-137.

11. Beheshtian M, Babanejad M, Azaiez H, **Bazazzadegan N**, Kolbe D, Sloan-Heggen C, Arzhangi S, Booth K, Mohseni M, Frees K, Azizi MH, Daneshi A, Farhadi M, Kahrizi K, Smith RJ, Najmabadi H. Heterogeneity of Hereditary Hearing Loss in Iran: a Comprehensive Review. Arch Iran Med. (2016) Oct 1;19(10):720-728.

12. Nazanin Esmaeili Anvar, **Niloofar Bazazzadegan**, Mina Ohadi, Kourosh Kamali, *Hamid Reza Khorram Khorshid. Association between Interleukin 16 Gene Polymorphisms (rs1131445, rs4072111) and Late Onset of Alzheimer's Disease in Iranian Patients. Iranian Journal of Aging. (2016) vol. 11, No.1.

13. Sloan-Heggen CM, Babanejad M, Beheshtian M, Simpson AC, Booth KT, Ardalani F, Frees KL, Mohseni M, Mozafari R, Mehrjoo Z, Jamali L, Vaziri S, Akhtarkhavari T, **Bazazzadegan N**, Nikzat N, Arzhangi S, Sabbagh F, Otukesh H, Seifati SM, Khodaei H, Taghdiri M, Meyer NC, Daneshi A, Farhadi M, Kahrizi K, Smith RJ, Azaiez H, Najmabadi H, Characterising the spectrum of autosomal recessive hereditary hearing loss in Iran. J Med Genet. (2015).

14. Farzaneh Larti, Kimia Kahrizi, Luciana Musante, Hao Hu, Elahe Papari, Zohreh Fattahi, **Niloofar Bazazzadegan**, Zhe Liu, Mehdi Banan, Masoud Garshasbi, Thomas Wienker, Hans-Hilger Ropers, Niels Galjart, Hossein Najmabadi. A defect in the CLIP1 gene (CLIP-170) can cause autosomal recessive intellectual disability. Eur J Hum Genet. (2015) Mar; 23(3):416.

15. Reihaneh Hadji Alikhani; Fatemeh Ostaresh; Mojgan Babanejad; **Niloofar Bazazzadegan**; Hossein Najmabadi ; Kimia Kahrizi, Investigating Seven Recently Identified Genes in 100 Iranian Families with Autosomal Recessive Non-syndromic Hearing Loss. Iranian Rehabilitation Journal, Vol. 13, Issue 3, Autumn 2015.

16. Khoshbakht T, Soosanabadi M, Neishaboury M, Kamali K, Karimlou M, **Bazazzadegan N**, Khorram Khorshid HR, An association study on IL16 gene polymorphisms with the risk of sporadic Alzheimers disease. Avicenna J Med Biotechnol. (2015) Jul-Sep; 7 (3): 128-32.

17. Atie Kashef , Nooshin Nikzat, **Niloofar Bazzazadegan**, Zohreh Fattahi, Farahnaz Sabbagh-Kermani, Maryam Taghdiri, Batool Azadeh, Faezeh Mojahedi, Atefeh Khoshaeen, Haleh Habibi, Hossein Najmabadi, Kimia Kahrizi, Finding mutation within non-coding region of GJB2 reveals its importance in genetic testing of Hearing Loss in Iranian population. International Journal of Pediatric Otorhinolaryngology. 79 (2015):136–138.

18. Shearer AE, Eppsteiner RW, Booth KT, Ephraim SS, Gurrola J 2nd, Simpson A, Black-Ziegelbein EA, Joshi S, Ravi H, Giuffre AC, Happe S, Hildebrand MS, Azaiez H, Bayazit YA, Erdal ME, Lopez-Escamez JA, Gazquez I, Tamayo ML, Gelvez NY, Leal GL, Jalas C, Ekstein J, Yang T, Usami S, Kahrizi K, **Bazazzadegan N**, Najmabadi H, Scheetz TE, Braun TA, Casavant TL, LeProust EM, Smith RJ., Utilizing ethnic-specific differences in minor allele frequency to recategorize reported pathogenic deafness variants. Am J Hum Genet. (2014) Oct 2;95(4):445-53.

19. Kimia Kahrizi, **Niloofar Bazazzadegan**, Leila Jamali, Nooshin Nikzat, Atie Kashef, Hossein Najmabadi., A novel mutation of the USH2C (GPR98) gene in an Iranian family with Usher syndrome Type II. J Genet. (2014) Dec; 93(3):837-41.

20. Mojgan Babanejad, **Niloofar Bazazzadegan**, Zohreh Fattahi, Nooshin Nikzat, Elahe Sohrabi, Khadijeh Jalalvand, Sanaz Arzhangi, Amin Najmabadi, Richard J.H. Smith, Kimia Kahrizi, Hossein Najmabadi*., A comprehensive study to determine heterogeneity of autosomal recessive non-syndromic hearing loss in Iran. American Journal of Medical Genetics A. (2012) Oct; 158A(10):2485-92.

21. Zohreh Fattah, A. Eliot Shearer , Mojgan Babanejad, **Niloofar Bazazzadegan**, Seyed Navid Almadani, Nooshin Nikzat, Khadijeh Jalalvand, Sanaz Arzhangi, Fatemehsadat Esteghamat ,Rezvan Abtahi, Batool Azadeh, Richard J.H. Smith, Kimia Kahrizi, Hossein Najmabadi. Screening for MYO15A gene mutations in an autosomal recessive non-syndromic, GJB2 negative Iranian Deaf population. American Journal of Medical Genetics A. (2012) Aug; 158 A(8): 1857-64.

22. Behzad Davarnia; Mojgan Babanejad; Zohreh Fattahi; Nooshin Nikzat; **Niloofar Bazazzadegan**; Akbar Pirzade; Reza Farajollahi; Carla Nishimura; Khadijeh Jalalvand; Sanaz Arzhangi; Kimia Kahrizi; Richard J Smith; Hossein Najmabadi. Spectrum of GJB2 (Cx26) gene mutations in Iranian Azeri patients with nonsyndromic autosomal recessive hearing loss. International Journal of Pediatric Otorhinolaryngology. (2012) 76, 268-271.

23. **Niloofar Bazazzadegan**, Nooshin Nikzat, Zohreh Fattahi, Carla Nishimura, Nicole Meyer, Shima Sahraian, Payman Jamali, Mojgan Babanejad, Atie Kashef, Hilda Yazdan, Farahnaz Sabagh, Maryam Taghdiri, Batool Azadeh, Faezeh Mojahedi, Atefeh Khoshaein, Haleh Habibi, Farahnaz Reyhanifar, Narges Nouri, Richard J. H. Smith, Kimia Kahrizi, Hossein Najmabadi. The Spectrum of GJB2 mutations in the Iranian population with Non-Syndromic Hearing Loss – A twelve year study. International Journal of Pediatric Otorhinolaryngology. (2012) Aug; 76(8): 1164-74.

24. **Bazazzadegan Niloofar**, Nishimura Carla, Sobhani Masoomeh, Van Camp Guy, Nele Hilgert, Seyedeh Sedigheh Abedini, Habibi Farkhondeh, Fatemehsadat Esteghamat, Kahrizi Kimia, Sheffield Abraham, Smith Richard J.H., Najmabadi Hossein. Two Iranian Families with a Novel Autosomal Dominant GJB2-Mutation Causing Nonsyndromic Autosomal Dominant Hearing Loss. Am J Med Genet part A, (2011). 155: 1202-1211.

25. Vahideh Norouzi , Hiva Azizi, Zohreh Fattahi , Fatemehsadat Esteghamat, **Niloofar Bazazzadegan**, Carla Nishimura, Nooshin Nikzat, Khadijeh Jalalvand, Kimia Kahrizi, Richard. J. H. Smith, Hossein Najmabadi. Did the GJB2 35delG Mutation Originate in Iran? American Journal of Medical Genetics part A (2011). 155A(10):2453-8.

26. Masoud Motasaddi Zarandy, Mersedeh Rohanizadegan, Hojjat Salmasian, Nooshin Nikzad, **Niloofar Bazazzadegan**, and Mahdi Malekpour. Clinical Application of Screening for GJB2 Mutations before Cochlear Implantation in a Heterogeneous Population with High Rate of Autosomal Recessive Non-Syndromic Hearing Loss. Genetics Research International.(2011):787026.

27. Tao Yang, Kimia Kahrizi, **Niloofar Bazazzadegan**, Nicole Meyer, Hossein Najmabadi, Richard J.H. Smith. A novel mutation adjacent to the Bth mouse mutation in the TMC1 gene makes this mouse an excellent model of human deafness at the

DFNA36 locus. Clin Genet. (2010) Apr;77(4):395-8.

28. Hildebrand MS, Kahrizi K, Bromhead CJ, Shearer AE, Webster JA, Khodaei H, Abtahi R, **Bazazzadegan N**, Babanejad M, Nikzat N, Kimberling WJ, Stephan D, Huygen PL, Bahlo M, Smith RJ, Najmabadi H. Mutations in TMC1 are a common cause of DFNB7/11 hearing loss in the Iranian population. Ann Otol Rhinol Laryngol. (2010) Dec;119(12):830-5.

29. Hilgert N, Kahrizi K, Dieltjens N, **Bazazzadegan N**, Najmabadi H, Smith RJ, Van Camp G. A large deletion in GPR98 causes type IIC Usher syndrome in male and female members of an Iranian family. J Med Genet. (2009) Apr;46(4):272-6.

30. Kahrizi K, Mohseni M, Nishimura C, **Bazazzadegan N**, Fischer SM, Dehghani A, Sayfati M, Taghdiri M, Jamali P, Smith RJ, Azizi F, Najmabadi H. Identification of SLC26A4 gene mutations in Iranian families with hereditary hearing impairment. Eur J Pediatr. (2008) Sep 24.

31. Anoush Naghavi, Carla Nishimura, Kimia Kahrizi, Yasser Riazalhosseini, **Niloofar Bazazzadegan**, Marzieh Mohseni, Richard J. H. Smith, Hossein Najmabadi. GJB2 mutations in Baloochi population. Journal of Genetics, (2008) vol. 87, No.2.

32. H. Najmabadi, C. Nishimura , K. Kahrizi, ,Y. Riazalhosseini, M. Malekpour, A. Daneshi, Y. Shafeghati, M. Farhadi, M. Mohseni, N. Mahdieh, A. Ebrahimi, **N. Bazazzadegan**, A. Naghavi, M. Avenarius, S. Arzhangi, K. Javan, RJH. Smith. GJB2 mutations - Passage through Iran. Am J Med Genet A. (2005) Mar 1; 133 (2): 132-7.

2. Books

Year	Book title	Publisher	Location
2022	Precision medicine in clinical practice, chapter 8: DNA technologies in precision medicine and pharmacogenetics	Springer Nature	Singapore