

# Resume of Dr. Zeinab Ravesh

## Academic Background

**Current level** PhD in Human/Molecular Genetics  
(Linkage Analysis of Pakistani Families with Autosomal Recessive Retinitis Pigmentosa)  
Quaid -i- Azam University, **Pakistan, Islamabad**

**Grad Level** Bachelors of Science in Genetics  
  
Institution: Nizam College, **Hyderabad, India**  
  
Masters of Science in Genetics  
  
Institution: Osmania University, **Hyderabad, India.**

**High School** Amir Bahador high school – **Iran, Tehran**

**Elementary &** William E.Cottle School- **New York- USA**

**Junior High School**

## Research & Projects Undertaken

- Molecular Geneticist at **Genomic Research Center**, Shahid Beheshti University. Assessment of breast cancer mutations, determination of rare Genetic disorders in the Iranian population and Mutation detection in patients with hereditary Retinal dystrophies (2014- Present)
- Researcher at **Genomic Research Center**, Shahid Beheshti University. Determination of mutation in Iranian families with Van Der Woud Syndrome (2014- 2016)
- Identification of novel Mutations in Pakistani population with retinal dystrophies. Under the supervision of Dr. M. Ansar. **Quaid-e-Azam University**. Department of Biochemistry. Lab of Genomics. Islamabad, Pakistan. (2011- 2015).
- Deletion break point mapping in patients suffering from Blue Cone Monochromacy (BCM) at **Institute for Ophthalmic Research**. Under Prof. Wissinger's supervision. (2013)
- Guest researcher at **Institute for Ophthalmic Research**. Molecular Genetics laboratory. Under the supervision of Prof. B. Wissinger, Principal Investigator of Molecular Genetics Laboratory. Tubingen, Germany. (July 2013- Dec 2013)

- Research assistant and in-charge of DNA bank at **Royan Regenerative Medicine Center**, Molecular biology laboratory under the supervision of Dr. Naser Aghdami and Dr. Marziyeh Ebrahimi. Tehran, Iran. (2010-2011)
- Nuclear Matrix Proteins of Drosophila Melanogaster. **CCMB** (Center for Cellular and Molecular Biology) Hyderabad, India. Under the supervision of Dr. Rakesh K. Mishra. (2009)
- Mitochondrial DNA and Y Chromosome analysis of the Iranian Shia population Of Hyderabad-India. **CCMB** (Center for Cellular and Molecular Biology) Hyderabad, India. Under the supervision of Dr.K.Thangaraj and The Director of CCMB Dr. Lalji Singh. (2007-2009)

### Technical Skills

**Molecular Genetics:** Blood sample collection. Isolation/extraction of DNA from blood by Phenol/Chloroform method. Polymerase Chain Reaction (PCR), RT-PCR, q-PCR. RFLP. Gel Electrophoresis (Agarose & PAGE). Genome wide Homozygosity mapping. Candidate gene analysis. DNA Sequencing and sequence analysis. Cloning of expression constructs (Mini Gene Splice Assay -Exon Trapping). Site directed Invitro Mutagenesis. RNA extraction. cDNA preparation. Genome Walking and breakpoint mapping. Isolation of DNA & RNA from different Viruses (CMV,HIV,HCV,HBV) for detection analysis.

**Cell Culture.** Transformation and Transfection.

**Animal Experimentation:** Drosophila Melanogaster handling. Mating and Genotype-Phenotype studies of Drosophila Melanogaster expressing various mutations of the eyes and wings. Salivary gland extraction from Drosophila larvae.

### Publications

- Advanced Molecular Approaches Pave the Road to Clear Cut Diagnosis of Hereditary Retinal Dystrophies. **Zeinab Ravesh**, Mahdi Dianatpour, Majid Fardaei, Maryam Taghdiri, Feyzollah Hashemi-Gorji, Vahid Reza Yassaee, Mohammad Miryounesi. Molecular Vision 2018; 24:679-689
- Whole exome sequencing unraveled the mystery of neurodevelopmental disorders in three Iranian families. **Zeinab Ravesh.**, Soudeh Ghafouri-Fard., Masoumeh Rostami., Nasrin Alipour., Vahid Reza Yassaee., Mohammad Miryounesi. Gene Reports December 2018; 13:141-145.
- A new mutation in steroidogenic acute regulatory protein (StAR) is segregated in an Iranian family. Ghafouri-Fard, S., Yassaee, V.R., Alipour, N., **Ravesh, Z.**, Miryounesi, M. Meta Gene. 2018. 16, pp. 196-198.

- Clinical, biochemical and molecular features of Iranian families with mucopolysaccharidosis: a case series. Yassae VR, Hashemi-Gorji F, Miryounesi M, Rezayi A, **Ravesh Z**, Yassae F, Salehpour Sh. Clin Chim Acta. 2017 Aug 24;474:88-95.
- Multidisciplinary Management of a Patient with Van der Woude Syndrome: A Case Report. Tehranchi A, Behnia H, Nadjmi N, Yassae V.R, **Ravesh Z**, Minai M. International Journal of Surgery Case Reports. 2016.11.032.
- Mutation Spectra of BRCA Genes in Iranian Women with Early Onset Breast Cancer - 15 Years' Experience. Yassae VR, **Ravesh Z**, Soltani Z, Hashemi-Gorji F, Poorhosseini SM, Anbiaee R, Joulaee A. Asian Pac J Cancer Prev. 2016;17 Spec No.:149-53.
- New Gene Profiling in Determination of Breast Cancer Recurrence and Prognosis in Iranian Women. Poorhosseini SM, Hashemi M, Alipour Olyaei N, Izadi A, Moslemi E, **Ravesh Z**, Hashemi-Gorji F, Kheiri HR, Yassae VR. Asian Pac J Cancer Prev. 2016;17 Spec No.:155-60.
- A novel homozygous *LMNA* mutation (p.Met540Ile) causes Mandibuloacral Dysplasia type A. VAHID REZA YASSAEE, Arash Khojaste, Feyzollah Hashemi-Gorji , **Zeinab Ravesh** , Parviz Toosi. Gene 2015. Gene. 2016 Feb 10;577(1):8-13. doi: 10.1016/j.gene.2015.08.071.
- Novel *C8ORF37* mutations cause retinitis pigmentosa in consanguineous families of Pakistani origin. **Ravesh Z**, El Asrag ME, Weisschuh N, McKibbin M, Reuter P, Watson CM, Baumann B, Poulter JA, Sajid S, Panagiotou ES, O'Sullivan J, Abdelhamed Z, Bonin M, Soltanifar M, Black GC, Amin-ud Din M, Toomes C, Ansar M, Inglehearn CF, Wissinger B, Ali M. Mol Vis. 2015 Mar 7;21:236-43. eCollection 2015.
- Traces of sub-Saharan and Middle Eastern lineages in Indian Muslim populations. Eaaswarkhanth M, Haque I, **Ravesh Z**, Romero IG, Meganathan PR, Dubey, B, Khan FA, Chaubey G, Kivisild T, Tyler-Smith C, Singh L, Thangaraj K. Eur J Hum Genet. 2010 Mar;18(3):354-63. Epub 2009 Oct 7.
- Diverse genetic origin of Indian Muslims: evidence from Autosomal STR loci, Eaaswarkhanth M, Haque I, **Ravesh Z**, Khan FA, Kivisild T, Smith CT, Singh L, Thangaraj K. J Hum Genet. 2009 Jun;54(6):340-8. Epub 2009 May 8.
- Crocin from Kashmiri saffron (*Crocus sativus*) induces in vitro and in vivo xenograft growth inhibition of Dalton's lymphoma (DLA) in mice. Bakshi HA, Sam S, Feroz A, **Ravesh Z**, Shah GA, Sharma M. Asian Pac J Cancer Prev. 2009;10(5):887-90.

### Software & Websites

- Homozygosity Mapper, UCSC, Ensembl Genome Browser, NCBI, Mutation Taster, SIFT, Polyphen2. SWISS-MODEL, Human Splice Site Finder, Mutationdiscovery, Varsome.

### Editorship for Scientific Journals

- ad hoc reviewer for scientific journals including Molecular Vision and Journal of Ophthalmic & Vision Research.
- JSM Clinical Case Report

### Awards

- **Awarded** travel grants by **Association for Research in Vision and Ophthalmology (ARVO)** for the top 50 abstract (Asia ARVO 2017, Feb 5 - 8, Brisbane, Australia).
- **Awarded Fellowship** by European Society of Human Genetics (**ESHG**). May 21-24, 2016, Barcelona- Spain.
- **Awarded** by **Dr. Carlo Rivolta** (Department of Computational Biology University of Lausanne) for outstanding PhD work and thesis.
- **Friedrich Neelsen Research Award-2015** in Biotechnology accredited by International Agency for Standards and Ratings (IASR) as **World's 500 Most Influential Biotechnologists for the Year 2015 on Earth**.
- **Awarded** travel grants by **Association for Research in Vision and Ophthalmology (ARVO)** for the top 50 abstract (Asia ARVO 2015, Feb 16 - 19, Yokohama, Japan).

### Citable Abstracts

- **TV Programs:** Invited to **"Research Engine"** TV show to talk about **Genes and Epigenetic Changes**
- **Oral Presentation** on Mutation Detection of Pakistani Families with Autosomal Recessive Retinal Dystrophies. EVER 2017, Sept 27-30. Nice, France
- **Oral Presentation** on Mutation Detection of Pakistani Families with Autosomal Recessive Retinal Dystrophies. Asia ARVO 2017, Feb 5 - 8, Brisbane, Australia.
- Sayedhassani S.M, **Z. Ravesh** (2017) Next Generation Sequencing Reveals Novel and Known Mutations in Iranian Families with Congenital Retinal Dystrophies. (Asia ARVO 2017, Feb 5 - 8, Brisbane, Australia).

- **Z. Ravesh**, B. Wissinger, V. Yassaee, M. Ansar (2016) Linkage analysis of Pakistani families with autosomal recessive retinal dystrophies. (The EUROPEAN HUMAN GENETICS CONFERENCE, May 21-24 2016).
- F. Hashemi-Gorji, V. R. Yassaee, A. Khojasteh, P. Toossi, **Z. Ravesh** (2015) Impact of reasonable genetic testing in prevention of rare genetic disorders. (American Society of Human Genetics 65th Annual Meeting October 6–10, 2015 Baltimore, MD)
- V. R. Yassaee, Z. Soltani, **Z. Ravesh**, F. Hashemi-Gorgi, S. M Poorhosseini, R. Anbiaee, A. Joulaee.(2015) Mutation spectra of BRCA genes in Iranian women with early onset breast cancer, 15 years experiences. (American Society of Human Genetics 65th Annual Meeting October 6–10, 2015 Baltimore, MD)
- **Ravesh Zeinab**, Weisschu Nicole, Wissinger Bernd, Ansar Muhammad (2015): Molecular genetic analysis of Hereditary Retinal Dystrophies in Consanguineous Families from Pakistan. (Asia ARVO 2015, Feb 16 - 19, Yokohama, Japan).
- **Ravesh Z**, Weisschu N, Reuter P, Bonin M, Ansar M, Wissinger B. (2014): Molecular genetic analysis of Autosomal Recessive Retinitis Pigmentosa & Leber congenital amaurosis in Pakistani Population (25th Annual Meeting of the German Society of Human genetics, ESSEN 2014).
- Eaaswarkhanth M, Haque I, **Ravesh Z**, Khan, FA, Kivisild T, Smith CT, Singh L, Thangaraj K. (2008): The Genetic Legacy of Indian Muslims. (13th Human Genome Meeting Hyderabad, India, 27-30 September)

<b>PERSONAL DATA</b>	
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<b>Name</b>	Zeinab Ravesh
<b>Languages Known</b>	Persian, English, Hindi (Urdu), Deutsch
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