



Prof. Dr. Zeynep Ocak

Medical Genetics Specialist

Founder & Director of ECEGEN Genetics Center, Medical Genetics Specialist

Last updated: 3 September 2026

Prof. Dr. Zeynep Ocak is an experienced medical genetics specialist focusing on the diagnosis and evaluation of genetic disorders, particularly cancer genetics, rare and undiagnosed diseases, recurrent pregnancy loss, infertility, epilepsy, autism, and neurodevelopmental conditions.

As the founder and director of ECEGEN Genetic Diseases Evaluation Center, Prof. Dr. Zeynep Ocak advocates for a holistic approach where genetic diseases are evaluated not through a single finding alone, but by integrating the patient's clinical history, family pedigree, findings, and genomic data.

She conducts comprehensive genetic evaluations, particularly for unclarified conditions involving multiple systems or long-standing diagnostic odysseys.

At ECEGEN, advanced genetic testing is performed across a wide spectrum—from determining hereditary cancer risks to investigating the genetic etiologies of recurrent miscarriages, and from evaluating pediatric neurodevelopmental disorders to diagnosing ultra-rare diseases.

The primary objective is not merely identifying a variant, but accurately interpreting its pathogenicity, establishing a definitive diagnosis, and elucidating what this result signifies for the patient and their family.

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Selected publications

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Specialties & research areas

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Awards & academic honors

Areas of Expertise

Diagnosis of genetic diseases

Molecular genetics

Cytogenetics

Prenatal diagnosis

Education and Academic Career

2001	Medical School Graduation Atatürk University Faculty of Medicine
2007	Medical Genetics Specialty Training
2019	Professor Title Istinye University

Medical Specialty Thesis

Connexin 26 gene studies in autosomal recessive non-syndromic hearing loss. Atatürk University Faculty of Medicine, Department of Medical Genetics, 2007. Advisor: Prof. Dr. Sıtkı Öztaş.

Academic and Professional Positions

- ECEGEN Genetic Diseases Evaluation Center — Founder and Director
- Medical Genetics Specialist — Clinical and Molecular Genetic Evaluation

Scientific Activities

Projects

Scientific and Professional Memberships

Awards and Achievements

- Turkic World Science Honor Award (December 2024)
- Turkey Prestige Awards — Best Genetic Diagnosis Center of the Year (2024)
- Honorary Professor Title (August 2022)

Scientific Publications

This selected bibliography combines the works listed in ECEGEN's institutional physician profile dated 1 September 2026 with newer records verified through DOI and PubMed. Publication titles and journal names are retained in their original language.

1. **2025** Özçınar B, Ocak Z, Billur D, Ertuğrul B, Timirci-Kahraman Ö. Whole-Exome Sequencing: Discovering Genetic Causes of Granulomatous Mastitis. *International Journal of Molecular Sciences*. 2025;26(1):425.
DOI: [10.3390/ijms26010425](https://doi.org/10.3390/ijms26010425) · [PubMed](#)
2. **2023** Özer Y, Turan H, Dağdeviren Çakır A, Gökalp S, Ocak Z, Ercan O, Evliyaoğlu O. Left Ventricular Systolic Dysfunction Related to Adrenal Insufficiency in a Case due to Autoimmune Polyendocrine Syndrome Type 1 with a Novel Variant. *Molecular Syndromology*. 2023;14(1):65-70.
DOI: [10.1159/000526221](https://doi.org/10.1159/000526221) · [PubMed](#)
3. **2021** Kılınç AA, Çebi MN, Ocak Z, Çokugraş HC. The Relationship between Genotype and Phenotype in Primary Ciliary Dyskinesia Patients. *Şişli Etfal Hastanesi Tıp Bülteni*. 2021;55(2):188-192.
DOI: [10.14744/SEMB.2020.22567](https://doi.org/10.14744/SEMB.2020.22567) · [PubMed](#)
4. **2019** Pehlivan D, Bayram Y, Gunes N, et al. The Genomics of Arthrogryposis, a Complex Trait: Candidate Genes and Further Evidence for Oligogenic Inheritance. *American Journal of Human Genetics*. 2019;105(1):132-150.
DOI: [10.1016/j.ajhg.2019.05.015](https://doi.org/10.1016/j.ajhg.2019.05.015) · [PubMed](#)
5. **2016** Aldemir S, Acar M, Ocak Z, Dalbudak E, Yiğitoğlu MR, Gündüz E. Association of 5-HT1A and 5-HT1B Gene Polymorphisms with Obsessive-Compulsive Disorder in a Turkish Population. *Bulletin of Clinical Psychopharmacology*. 2016;26(2):134-140.
DOI: [10.5455/bcp.20151003063454](https://doi.org/10.5455/bcp.20151003063454)
6. **2016** Bornaun H, Oztarhan K, Ocak Z, Ekiz A, Ulucan K, Buyukkale G, Gedikbaşı A. Contribution of TGFB1 and TNF-α genes in one of twin pregnancies with congenital complete heart block phenotype. *International Journal of Cardiology*. 2016;210:16-18.
DOI: [10.1016/j.ijcard.2016.01.214](https://doi.org/10.1016/j.ijcard.2016.01.214) · [PubMed](#)
7. **2016** Özcan Ü, Ocak Z, Özcan F, Oktay EA, Toptaş O, Şahman H, Yıkılğan I, Oruçoğlu H, Er K. Association of Toll-like receptors 2, 3, and 4 genes polymorphisms with periapical pathosis risk. *Medicina Oral, Patología Oral y Cirugía Bucal*. 2016;21(4):e408-e412.
DOI: [10.4317/medoral.21081](https://doi.org/10.4317/medoral.21081) · [PubMed](#)
8. **2015** Güleç EY, Ocak Z, Candan S, Ataman E, Yazar C. Novel mutations in PTPN11 gene in two girls with Noonan syndrome phenotype. *International Journal of Cardiology*. 2015;186:13-15.
DOI: [10.1016/j.ijcard.2015.03.260](https://doi.org/10.1016/j.ijcard.2015.03.260) · [PubMed](#)
9. **2015** Simavlı H, Tosun M, Bucak YY, Erdurmuş M, Ocak Z, Önder Hİ, Acar M. Serum and aqueous xanthine oxidase levels, and mRNA expression in anterior lens epithelial cells in pseudoexfoliation. *Graefes' Archive for Clinical and Experimental Ophthalmology*. 2015;253:1161-1167.
10. **2014** Acar M, Ocak Z, Erdoğan K, Çetin EN, Hatipoğlu OF, Üyetürk U, Gündüz E, Gündüz M. The effects of hypericin on ADAMTS and p53 gene expression in MCF-7 breast cancer cells. *Journal of BUON*. 2014;19(3):627-632.
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11. **2014** Ocak T, Duran A, Özyalvaçlı G, Ocak Z, Terzi EH, Tosun M, Erdem K. Protective effects of montelukast and Hypericum perforatum against intestinal ischemia-reperfusion injury in hamsters. Turkish Journal of Medical Sciences. 2014;44(3):381-386.
DOI: 10.1177/0748233712466131 · PubMed
12. **2014** Ocak T, Ocak Z, Doğan H, Uzkeser M, Yeşilyurt A, İkbal M, Aslan Ş. Relationship between carbon monoxide intoxication and sister chromatid exchange in lymphocytes. Toxicology and Industrial Health. 2014;30(10):896-900.
DOI: 10.1177/0748233712466131 · PubMed
13. **2014** Ocak Z, Özlü T, Taşdemir S, Bilen H, Kocaman EM. Are there any genotoxic effects of laser epilation applications on human? An observational study. National Journal of Physiology, Pharmacy and Pharmacology. 2014;4(1):43-46.
DOI: 10.1111/jog.12144 · PubMed
14. **2014** Ocak Z, Özlü T, Yazıcıoğlu HF, Özyurt O, Aygün M. Clinical and cytogenetic results of a large series of amniocentesis cases from Turkey: report of 6124 cases. Journal of Obstetrics and Gynaecology Research. 2014;40(1):139-146.
DOI: 10.1111/jog.12144 · PubMed
15. **2014** Ocak Z, Üyetürk U, Dinçer MM. Clinical and prognostic importance of chromosomal abnormalities, Y chromosome microdeletions, and CFTR gene mutations in individuals with azoospermia or severe oligospermia. Turkish Journal of Medical Sciences. 2014;44(2):347-351.
DOI: 10.3906/sag-1301-67 · PubMed
16. **2014** Özlü T, Ocak Z, Özyurt O. Prenatal diagnosis of Pallister-Killian syndrome in a fetus with congenital diaphragmatic hernia, short limbs, and increased nuchal translucency. Taiwanese Journal of Obstetrics & Gynecology. 2014;53(3):404-405.
DOI: 10.1016/j.tjog.2013.06.015 · PubMed
17. **2014** Özlü T, Ocak Z, Simavlı S, Karataş A. Polymorphisms of Toll-like receptor 2, 3 and 4 in patients that do and do not enter labour spontaneously at term. Journal of Obstetrics and Gynaecology. 2014;34(6):476-478.
DOI: 10.1016/j.ab.2013.07.007 · PubMed
18. **2013** Barış I, Etlik O, Köksal V, Ocak Z, Barış ST. SYBR green dye-based probe-free SNP genotyping: introduction of T-Plex real-time PCR assay. Analytical Biochemistry. 2013;441(2):225-231.
DOI: 10.1016/j.ab.2013.07.007 · PubMed
19. **2013** Dinçer M, Karahasanoğlu A, Çilingir U, Özdemir ME, Ocak Z, Karahüseyinoğlu S, Yücel O. Frequency of Y chromosome microdeletions and chromosomal abnormalities in infertile Turkish men. Genetic Counseling. 2013;24(4):431-434.
PubMed
20. **2013** Ocak T, Ocak Z, Duran A, Bilgi M, Demirhan A, Şit M. The approach to the case of rarely seen adult Morquio syndrome at emergency service. South Eastern Europe Health Sciences Journal. 2013;3:93-96.
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21. **2013** Ocak Z, Acar M, Gündüz E, Gündüz M, Demircan K, Üyetürk U, Özlü T. Effect of hypericin on the ADAMTS-9 and ADAMTS-8 gene expression in MCF7 breast cancer cells. European Review for Medical and Pharmacological Sciences. 2013;17(9):1185-1190.
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22. **2013** Ocak Z, Ocak T, Duran A, Özlü T, Kocaman EM. Frequency of MEFV mutation and genotype-phenotype correlation in cases with dysmenorrhea. Journal of Obstetrics and Gynaecology Research. 2013;39(8):1314-1318.
DOI: 10.1111/jog.12061 · PubMed

23. **2013** Ocak Z, Özlü T, Özyurt O. The association of recurrent pregnancy loss with chromosomal abnormalities and hereditary thrombophilias. *African Health Sciences*. 2013;13(2):447-452.
DOI: 10.4314/ahs.v13i2.35 · PubMed
24. **2013** Ocak Z, Özlü T, Vural M. Anal atresia, abnormal genitalia and absent thumb: congenital malformations associated with mosaic ring chromosome 13. *Genetic Counseling*. 2013;24(2):157-160.
25. **2013** Ocak Z, Yazıcıoğlu HF, Aygün M, İter MK, Özlü T. Prenatal detection of Pai syndrome without cleft lip and palate: a case report. *Genetic Counseling*. 2013;24(1):1-5.
26. **2012** Ocak Z, Göksügür SB, Kocaman EM. Dirençli epilepsi olgusunda mozaik ring kromozom 6 ve klinik önemi. *Türk Pediatri Arşivi*. 2012;47:315-316.
27. **2012** Ocak Z, Sürücü R. Molecular cytogenetic characterization of a case of primary amenorrhea with intrachromosomal triplication of the X chromosome q arm. *Genetic Counseling*. 2012;23(3):297-304.
28. **2010** Yazıcıoğlu F, Ocak Z. Walker-Warburg syndrome with hyperplastic primary vitreous detected by prenatal ultrasonography: case report. *Ultrasound in Obstetrics & Gynecology*. 2010;35(2):247-249.
29. **2009** Tatar A, Ocak Z, Tatar A, Yeşilyurt A, Börekçi B, Öztaş S. Primary hypogonadism, partial alopecia, and Müllerian hypoplasia: report of a third family and review. *American Journal of Medical Genetics Part A*. 2009;149A(3):501-504.
DOI: 10.1002/ajmg.a.32645 · PubMed
30. **2008** Tatar A, Ocak Z, Döneray H, Işık E, Yeşilyurt A, Özkan B, Öztaş S. Seckel syndrome with spontaneous chromosomal instability: a case report. *Turkish Journal of Medical Sciences*. 2008;38(1):77-81.
31. **2007** Öztaş S, Salman AB, Tatar A, Yiğiter M, Yazgı H, Ertek M, Yeşilyurt A, Ocak Z, Kürşat H. Genotoxic effect of albendazole in pediatric patients with hepatic hydatid disease. *International Journal of Infectious Diseases*. 2007;11(5):446-449.
DOI: 10.1016/j.ijid.2007.01.002 · PubMed

Sources and scope: ECEGEN institutional physician profile (3 September 2026), verified public academic records, and peer-reviewed bibliographic entries indexed in DOI/PubMed.

Note: This document is an executive curriculum vitae and selected publication record prepared for professional introduction. Publication titles and journal names are preserved in their original language.

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