

PROF. DR. NESRİN ERCELEN

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DR. ERCELEN'S PROFESSIONAL BACKGROUND

Dr. Ercelen received her certification in Assisted Reproductive Technology (ART) and Preimplantation Genetic Diagnosis (PGT) from the Reproductive Genetics Institute in Chicago in 2000. From 2000 to 2010, she established and directed the Center for Genetic and Genomic Sciences at the American Hospital in Istanbul. In September 2011, she became an Associate Professor at the Department of Medical Genetics, Bahçeşehir University School of Medicine. She then founded and directed the Regenerative Medicine and Stem Cell Research and Treatment Center at Liv Hospital in Istanbul. In July 2014, she obtained the first license from the Turkish Ministry of Health for a GMP-certified stem cell therapy clinic.

From 2018 to 2021, Dr. Ercelen served as the President of AtiGen-Cell Tissue and Stem Cell Center. As the Medical Director, she led a Covid-MSK Treatment Program for the Turkish Ministry of Health and academic institutions. In 2021, she became the Vice Dean at Haliç University School of Medicine and launched the Genomics and Regenerative Medicine Program. In 2022, she began her role as Head of the Department of Medical Genetics at Üsküdar University School of Medicine, where she initiated the Personalized Genomic Medicine and Regenerative Medicine PhD Program.

Throughout her clinical career, Dr. Ercelen has contributed hundreds of cases to the ESHRE PGD Consortium International Society Database. She has provided genetic counseling and clinical diagnostic laboratory reports to over a thousand patients in the fields of genetic oncology, molecular genetics, cytogenetics, and preimplantation genetic diagnosis. Additionally, she has performed hundreds of DNA SNP analyses and provided personalized reports for patients indicated for preventive medicine.

In her regenerative medicine clinics, after obtaining her stem cell license, Dr. Ercelen has successfully treated numerous patients with cartilage diseases, scars, diabetic and other acute/chronic wounds, and ischemic limb diseases using biological and stem cell procedures. She continues to use stem cell therapy for systemic diseases such as Covid-19 and stroke.

Dr. Ercelen has contributed to scientific articles in national and international journals. Throughout her career, she has taught at national and international conferences, courses, and workshops for students and medical professionals. Her special interests include clinical genetics, prenatal diagnosis, preimplantation genetic diagnosis (PGT), reproductive genetics, preventive/personalized genetics, and regenerative medicine/stem cell therapies.

EXPERIENCE

Uskudar University

Director of Biotechnology Research and Application Center - BIYOTEKMER

2024 - Present
Istanbul, Turkey

- Responsible for directing the projects and researchers at genetics and regenerative medicine clinics.

Uskudar University, Medical Genetics

Graduate Program Director

2024 - Present
Istanbul, Turkey

- Responsible for the development and leadership of the Medical Genetics Graduate Program, overseeing academic and research activities, and mentoring students.

Uskudar University, Medical School

Professor, Head of Medical Genetics Department

2022 - Present
Istanbul, Turkey

- Engaged in teaching medical genetics, conducting research, and supervising graduate students.

- Haliç University, Medical School** 2021 - 2022
Dean of Medical School Istanbul, Turkey
- Oversaw administrative duties, curriculum development, and advanced research in medical genetics.
- AtiGen-Cell Tissue and Stem Cell Center** 2019 - Present
Responsible Physician/Medical Director Trabzon, Turkey
- Managed clinical operations, developed stem cell therapies, and provided patient care.
- University of California Irvine, School of Medicine, Department of Medical Genetics** 2018 - 2019
Visiting Professor CA, USA
- Collaborated on research projects, taught, and mentored students in medical genetics.
- VKV American Hospital Genetics Department** 2011 - Present
Consultant Istanbul, Turkey
- Provided genetic consultations, performed diagnostic evaluations, and contributed to clinical research.
- Bahçeşehir University Medical School, Medical Genetics Department** 2010 - 2015
Associate Professor Istanbul, Turkey
- Involved in teaching, research, and the establishment of a new medical genetics program.
- Regenerative Medicine Stem Cell Research (GMP) and Therapy Center, Liv Hospital** 2011 - 2014
Medical Chief Istanbul, Turkey
- Established and directed the stem cell research center, obtained the first GMP license, and developed new treatment protocols.
- Genetics - Genomic Sciences Center, VKV American Hospital** 2000 - 2010
Medical Chief Istanbul, Turkey
- Established the genetics center, led clinical operations, and advanced genomic research.
- Reproductive Genetics Institute** 2000
Postdoctoral Fellow Chicago, USA
- Advanced training in reproductive genetics and preimplantation genetic diagnosis (PGD).
- Genetics and Genomic Sciences Center, Mount Sinai Faculty of Medicine** 1997 - 2000
Clinical Research Fellow New York City, USA
- Conducted clinical research, developed new genetic testing methodologies, and published research findings.
- Cytogenetics and Molecular Genetics Laboratory, New York Sunny University Long Island Hospital Genetics Department** 1995 - 1997
Research Fellow Long Island, USA
- Conducted cytogenetic and molecular genetics research, contributed to scientific publications, and advanced expertise.
- Gazi University Faculty of Medicine, Molecular Biology and Medical Genetics** 1996 - 2000
Research Assistant PhD Ankara, Turkey
- Completed PhD research, conducted experiments, and published findings.

EDUCATION

Hacettepe University

License in Medicine

Ankara, Turkey

1993

Gazi University

PhD in Medical Biology and Genetics

Ankara, Turkey

2000

Bahçeşehir University

Associate Professorship

Istanbul, Turkey

2015

Haliç University

Professorship in Medical Genetics

Istanbul, Turkey

2021

PUBLICATIONS

Sazci A, **Ercelen N**, Ergul E, Akpınar G. "Male factor infertility associated with a familial translocation $t(1;13)(q24;q10)$." *Fertil Steril*, 83(5): 1548-50, 2005 May.

Karaoguz MY, Bal F, Yakut T, **Ercelen N**, Gokcen AB, Biri AA, Kimya Y, Urman B, Gultomruk M, Egeli U, Menevse S. "Cytogenetic results of amniocentesis materials: incidence of abnormal karyotypes in the Turkish collaborative study." *Genet Couns*, 17(2): 219-30, 2006.

Yakut T, **Ercelen N**, Acar H, Kimya Y, Egeli U. "Meiotic segregation analysis of reciprocal translocations both in sperms and blastomeres." *Am J Med Genet A*, 140(10):1074-82, 2006 May 15.

Yakin K, Ata B, **Ercelen N**, Balaban B, Urman B. "The effect of preimplantation screening on the probability of live birth in young women with recurrent implantation failure; a nonrandomized parallel group trial." *Eur J Obstet Gynecol Reprod Biol*, 140(2): 224-9, 2008 Oct.

Arman A, Soylu O, Yildirim A, Furman A, **Ercelen N**, Aydoğan H, Coker A, Tezel T. "Interleukin-1 receptor antagonist gene VNTR polymorphism is associated with coronary artery disease." *Arq Bras Cardiol*, 91(5): 293-8, 2008 Nov.

Yesilipek MA, Karasu G, **Ercelen N**, Uygun V, Akcan M, Kupesiz A, Hazar V. "Successful hematopoietic SCT from non-identical twins to two sisters with B-thalassemia major by using preimplantation genetic diagnosis and HLA." *Bone Marrow Transplant*, 46(12): 1581-2, 2011 Dec.

Uysal A, Uludağ A, Silan F, **Ercelen N**, Zafer C, Özdemir, Öztürk. "Double translocation: an interesting family history." *Balkan Journal of Medical Genetics*.

Ercelen N, Ozturk B, Comert H, Diken M, Gultomruk M, Coskun H, Akat A. "Allelic frequencies of mutations in blood coagulation factor genes (Factor V, Factor II) and Methylenetetrahydrofolate Reductase (MTHFR) in 201 Turkish patients with venous thrombosis complications." *J Mol Gen Med*, DOI No: 10.4172/1747-0862.1000093.

Ercelen N. "Wellbeing and Genetics." *Türkiye Klinikleri*, 64-68 pp., 2018

Nesrin O Ercelen, Kubra Cigdem Pekkoc-Uyanik, Nagihan Alpaydin, Gokay Rasit Gulay, Murat Simsek. "Clinical experience on umbilical cord mesenchymal stem cell treatment in 210 severe and critical COVID-19 cases in Turkey." *National Library of Medicine*, 2021.

Marina Dutra-Clarke, Daisy Tapia, Emily Curtin, Dennis Rünger, Grace K. Lee, Anita Lakatos, Zyza Alandy-Dy, Linda Freedkin, Kathy Hall, **Nesrin Ercelen**, Jousef Alandy-Dy, Margaret Knight, Madeleine Pahl, Dawn Lombardo, Vir-

ginia Kimonis. "Variable clinical features of patients with Fabry disease and outcome of enzyme replacement therapy." *Molecular Genetics and Metabolism Reports*, Volume 26, 2021.

Ercelen, N. O., Bilgili B, Monteleone B, Gul F, Gulay G. R., Alpaydin N, Cinel I. "MSC Transplantation in Eight Severe COVID-19 Patients: Can Cytokine Storm Be Reversed?" *Journal of Stem Cell Research and Therapy*, 2020.

Nesrin Ercelen and Nilgun Karas. "A Perspective on UC-MSC Treatment in Severe and Critically Severe Covid-19 Patients." *21st Century Pathology*, Volume 2 (3):115, 2022.

Ercelen N, Karasu N, Kahyaoglu B, Cerezci O, Akduman R. C., **Ercelen D**, Aykut Bingol C. "Clinical Experience: Outcomes of Mesenchymal Stem Cell Transplantation in Five Stroke Patients." *Frontiers in Medicine*, 10, 2023.

BOOKS/ CHAPTERS

Besbelli N, Akpolat N, Özcan N, **Ercelen N.Ö**, Marklund H. "Mantar Zehirlenmeleri." Nov, 1995, T.C. Sağlık Bakanlığı Refik Saydam Hıfzısıhha Merkez Başkanlığı.

Ercelen N., "Dejeneratif Disk Hastalığında Genetik Tanı ve Yeni Tedavi Yaklaşımları," s261-270, *Dejeneratif Disk Hastalığı*, Türk Nöroşirurji Derneği Spinal ve Perisentrik Sinir Cerrahisi Grubu Yayınları, Editörler: Prof. Dr. Fahir Özer, Doç. Dr. Sait Naderi, 2004, İstanbul, Türkiye.

Ercelen N., "Dejeneratif Disk Hastalığında Genetik Yaklaşım ve Biyolojik Tedavi," s324-327, *Lomber Dejeneratif Disk Hastalığı ve Dinamik Stabilizasyon (kitap)*, Amerikan Hastanesi Yayınları, Editör: Prof. Dr. Fahir Ozer, 2011, İstanbul, Türkiye.

N. Ercelen, Fahir Ozer. "Lombar Degenerative Disc Diseases and Dynamic Stabilization (Genetic Approaches and Biological Treatments in Degenerative Disc Disease)," 365-370 pp., Intertıp Press, 2014.

PROJECTS

1003 - Priority Areas R-D Projects Support Program (1st stage)

2013

TÜBİTAK

- Examination of the Effects of Mesenchymal Stem Cells Derived from Different Sources, Progenitor Cells Induced from Mesenchymal Stem Cells and Combinations Consisting of Highly Directed Poly-Lactic Acid Nano-Fibers on Clinical Treatment of Experimentally Autoimmune Encephalomyelitis Animal Models for the Treatment of Multiple Sclerosis

1003 - Priority Areas R-D Projects Support Program (2nd stage)

2013

TUBİTAK

- Examination of the Effects of Mesenchymal Stem Cells Derived from Different Sources, Progenitor Cells Induced from Mesenchymal Stem Cells and Combinations Consisting of Highly Directed Poly-Lactic Acid Nano-Fibers on Clinical Treatment of Experimentally Autoimmune Encephalomyelitis Animal Models for the Treatment of Multiple Sclerosis

2209-A Student Project

2023-2024

TUBİTAK

- From Science to Drawing, From Drawing to Science, Demonstration of Stem Cell Structure and Functioning as an Animated Movie

3501-Career Development Program

TUBİTAK

- Development of Artificial Blood Vessel Using Electrospan Nanofibers

1003 - Priority Areas R-D Projects Support Program (2nd stage)

TUBİTAK

- Design and Engineering of Cartilage, Bone and Connective Tissue with Biomineralized Protein Composite Nanofiber Based Structures

1001-Research Project

TUBİTAK

- Obtaining Mesenchymal Stem Cells from Cord Blood, Fat Tissue and Peripheral Blood and Comparison of These Cells in Terms of Immunophenotypic / Genotypic Characterization

DIRECTED ACADEMIC PROGRAMS

Thesis Supervision

Uskudar University

Principal Investigator and Instructor

- **Gizem Boyraz:** Investigation of the Correlation of Polymorphisms Detected by Whole Exome Sequencing with Biomarkers in Autism Spectrum Disorder and Depression
- **Kemal Memişoğlu:** Development of Software for Clinical Risk Analysis in Personalized Medicine Using Bioinformatics and Artificial Intelligence in 200 Patients (Genotype, Epigenetic, and Phenotype Relationships: Schizophrenia, Alzheimer's, Mood Disorders, Autism, Metabolic Syndrome)
- **Zerrin Aldan:** Investigation of the Correlation of Polymorphisms Detected by Whole Exome Sequencing with Biomarkers in Metabolic Syndrome

COURSES

III. International Congress of Molecular Medicine organized by American Hospital, Genetics and Genomic Sciences Center

6 May 2009

Harbiye Military Museum, Istanbul

- Preimplantation Genetic Diagnosis in Reproductive Medicine
- Speaker: Dr. Nesrin Erçelen

SELECTED CAREER HIGHLIGHTS

1st Stem Cell Research Congress

28.09-02.10/2011

Sapanca, Turkey

- N. Erçelen, "Genomics of Embryonic Stem Cells (ESCs) and Induced Pluripotent Stem Cells (iPSCs) for Stem-Cell Based Therapeutic Approaches"

BACI Conference 2023

05/09/2023

Istanbul, Turkey

- N. Erçelen, "Stem Cell Treatment for Neurodegenerative Diseases"

Geneis Longevity Seminar

26/08/2023

Bodrum, Muğla

- N. Erçelen, "Geneis Longevity Seminar"

Lifetime by A4M Thailand

09/2013

Bangkok, Thailand

- N. Erçelen, "Adipose Derived Cell Therapy"

TSRM Congress

11/2022

Girne, Cyprus

- N. Erçelen, "Genetics and Stem Cell Treatments in Reproductive Medicine"

Global Congress and Expo on Vaccines and Immunization

11/2022

Virtual Event, USA

- N. Ercelen, "Global Congress and Expo on Vaccines and Immunization"

35th World Summit on COVID-19 (Part VI)

12/2022

SciTech Central COVID-19, USA

- N. Ercelen, <https://www.youtube.com/watch?v=fdgbowu63qgt=58s>"35th World Summit on COVID-19 (Part VI)"

Hipokrat Journal

August 2002

itemizeN. Ercelen, "Preimplantation Genetic Diagnosis," *Hipokrat Journal*, pp. 215-216.

Genetics and Molecular Research

November 2011

itemizeN. Ercelen, E. Tutar, M. Gultomruk, H. Comert, H. Coskun, R. Mercan, A. Nuhoglu, "Successful Preimplantation Genetic Aneuploidy Screening in Turkish Patients," *Genetics and Molecular Research*, 10(4). <https://www.geneticsmr.com/sites/default/4/pdf/gmri1751.pdf>Link to Article, <http://dx.doi.org/10.4238/2011.november.17.6>DOI

5th Joint Clinical Genetics Meeting

February 1998

Los Angeles, California

- N. Ercelen, A. Ekmekçi, B. Öztürk, I. Egehan, "Irritation Induced Chromosomal Abberations in Transfusion Blood," pp. 93-93.

58th Annual Meeting of the American Society for Reproductive Medicine

October 2002

Seattle, USA

- N. Ercelen, B. Balaban, A. Mumcu, E. Tutar, R. Mercan, B. Urman, "Embryo Morphology Grading and Preimplantation Genetic Diagnosis to Improve the Predictive Accuracy of Embryo Transfer in Couples with Advanced Age and/or Repeated Implantation Failures," *Fertility and Sterility*, pp. 185-185. https://www.researchgate.net/publication/240031579_embryo_morphology_gra

58th Annual Meeting of the American Society for Reproductive Medicine

October 2002

Seattle, USA

- B. Urman, B. Balaban, A. İşıklar, N. Ercelen, "The Effect of Different Pronuclear Patterns on the Aneuploidy Rate of Cleavage Stage Embryos and Subsequent Blastocyst Formation," *Fertility and Sterility*, pp. 500-500. <https://www.researchgate.net/publication>

5th International Symposium on Preimplantation Genetics

June 2003

Antalya, Turkey

- N. Ercelen, B. Balaban, A. İşıklar, E. Tutar, C. Alataş, S. Aksoy, K. Yakın, A. Nuhoglu, B. Urman, "Results of 165 PGD Cycles in Poor Prognosis IVF/ICSI Patients," pp. 30-30.

20th Annual Meeting of the European Society of Human Reproduction and Embryology

June 2004

Berlin, Germany

- N. Ercelen, M.C. Magley, D. Podini, A. Nuccitelli, N. Vitale, L. Brardinoni, M. Baldi, F. Fiorentino, L. Gianaroli, "Multiplates PCR of Polymorphic Markers Flanking the CYP21 Gene as a General Approach for Preimplantation Genetic Diagnosis of 21-Hydroxylase Deficiency," pp. 183-183.

13th World Congress on In Vitro Fertilization Assisted Reproduction and Genetics

May 2005

Istanbul, Turkey

- N. Ercelen, M. Gultomruk, H. Coskun, Y. Sağıroğlu, M. Diken, H. Comert, C. Alataş, S. Aksoy, K. Yakın, R. Mercan, A. Nuhoglu, B. Urman, "Chromosomal Abnormalities in Spontaneous and IVF/ICSI Pregnancy Losses," pp. 97-97.

6th International Symposium on Preimplantation Genetics

May 2005

London, UK

- N. Ercelen, B. Basak, M. Gultomruk, M. Diken, R. Mercan, B. Urman, "Clinical Outcome with Respect to Maternal Age in ICSI/PGD-AS Patients," pp. 18-18. https://www.researchgate.net/publication/273196228_o55_clinical_outcome_with_respect_to_maternal

1st National Molecular Medicine Congress

April 2005

Istanbul, Turkey

- N. Ercelen, H. Comert, M. Diken, "Genetic Screening of the Most Frequent Familial Mediterranean Fever Mutations in 68 Patients"

2nd National Reproductive Endocrinology and Infertility Congress

September 2006

Antalya, Turkey

- N. Ercelen, M. Gultomruk, H. Comert, E. Tutar, B. Balaban, R. Mercan, B. Urman, "Aneuploidy Research in Preimplantation Genetic Diagnosis: A Preventive Genetic Diagnosis Method in Reproductive Genetics" (Oral Presentation)

2nd Congress of Molecular Medicine from Cell to Bedside

March 2007

Istanbul, Turkey

- B. Yazar, O. Ilbay, H. Comert, N. Ercelen, "SNP Analyses for Preventive Genetic Diagnosis: Based on Breast Cancer Risk and Hormone Replacement Therapy-Risks and Benefits," pp. 315-315.

3rd National Reproductive Endocrinology and Infertility Congress

October 2008

Antalya, Turkey

- N. Ercelen, B. Yazar, T.S. Bora, H. Comert, "A Survey of Patients Who Received Testing for Hereditary Thrombophilia Panel Due to Miscarriage: A Clinical Geneticist Perspective"