# Prof. ÖZDEN HATIRNAZ NG

## Personal Information

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**International Researcher IDs**
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## Education Information

Doctorate, Istanbul University, Health Sciences Institute, Turkey 2005 - 2012
Postgraduate, Istanbul University, Health Sciences Institute, Turkey 2002 - 2005
Undergraduate, Istanbul University, Faculty Of Science, Depertment Of Biology, Turkey 1998 - 2002

## Dissertations

Doctorate, T-hücreli akut lenfoblastik lösemide genom boyu anlatım analizleri, Istanbul University, Sağlık Bilimleri Enstitüsü, 2012
Postgraduate, Kronik myeloid lösemi (KML) hastalarında, SOCS-1 gen metillenmesinin araştırılması, Istanbul University, Sağlık Bilimleri Enstitüsü, 2005

## Research Areas

Medicine, Medical Biology, Medical Genetics, Health Sciences, Fundamental Medical Sciences

## Academic Titles / Tasks

Professor, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Basic Sciences, 2023 - Continues
Associate Professor, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Basic Sciences, 2018 - 2023
Research Assistant, Istanbul University, Deneysel Tıp Araştırma Enstitüsü, Genetik Anabilim Dalı, 2005 - 2018

## Academic and Administrative Experience

Vice Dean, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Basic Sciences, 2024 - Continues
Deputy Director of the Center, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Medical Sciences, 2023 - Continues
Course Board Chairman, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Basic Sciences, 2022 - 2024
Assistant Director of the Institute, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Basic

Sciences, 2022 - 2023
Deputy Director of the Center, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Basic Sciences, 2019 - 2022
Yıl Koordinatörü, Acibadem Mehmet Ali Aydinlar University, School Of Medicine, Department Of Basic Sciences, 2019 - 2022
Acibadem Mehmet Ali Aydinlar University, 2019 - 2020

## Published journal articles indexed by SCI, SSCI, and AHCI

I. **Long-term immunological changes after corrective cardiac surgery**
Bilgic-Eltan S., Amirov R., Babayeva R., Yorgun Altunbas M., Karakurt T., Can S., Yalcin Gungoren E., Bozkurt S., Ozturk N., Catak M. C., et al.
Scandinavian Journal of Immunology, vol.100, no.6, 2024 (SCI-Expanded)

II. **Molecular and In Silico Analysis of the CHEK2 Gene in Individuals with High Risk of Cancer Predisposition from Türkiye.**
Ozdemir Ö., Bychkovsky B. L., Unal B., Onder G., Amanvermez U., Aydin E., Ergun B., Sahin I., Gokbayrak M., Ugurtas C., et al.
Cancers, vol.16, no.22, 2024 (SCI-Expanded)

III. **Pushing the boundaries of rare disease diagnostics with the help of the first Undiagnosed Hackathon.**
Delgado-Vega A. M., Cederroth H., Taylan F., Ekholm K., Ek M., Thonberg H., Jemt A., Nilsson D., Eisfeldt J., Bilgrav Saether K., et al.
Nature genetics, vol.56, no.11, pp.2287-2294, 2024 (SCI-Expanded)

IV. **Rapid genome sequencing for critically ill infants: an inaugural pilot study from Turkey.**
Guner Yilmaz B., Akgun-Dogan O., Ozdemir Ö., Yuksel B., Hatirnaz Ng Ö., Bilguvar K., Ay B., Ozkose G. S., Aydin E., Yigit A., et al.
Frontiers in pediatrics, vol.12, pp.1412880, 2024 (SCI-Expanded)

V. **Genomic disparity impacts variant classification of cancer susceptibility genes in Turkish breast cancer patients.**
Agaoglu N. B., Unal B., Hayes C. P., Walker M., Ng Ö., Doganay L., Can N. D., Rana H. Q., Ghazani A. A.
Cancer medicine, 2024 (SCI-Expanded)

VI. **Managing CDH1 Cancer Risks in a Child: Complex Decision Making in a Family With Hereditary Diffuse Gastric Cancer**
Agaoglu N. B., HATIRNAZ NG Ö., Zemheri I. E., Unal B., Gerenli N., Tosun I., Yazıcı H., Ozbek U., Kamihara J., Rana H. Q.
American Journal of Medical Genetics, Part A, 2024 (SCI-Expanded)

VII. **Memantine and SKF82958 but not an enriched environment modulate naloxone-precipitated morphine abstinence syndrome without affecting hippocampal tPA mRNA levels in rats**
Aslan A., Hatirnaz-Ng Ö., Tasar O., Ozbek U., Yamanturk-Celik P.
PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR, vol.234, 2024 (SCI-Expanded)

VIII. **A new line method; A direct test in spinal muscular atrophy screening for DBS**
Kubar A., Temel S. G., Beken S., Onder G., Hatirnaz Ö., Korkmaz A., Alanay Y., Ozbek U., Sag S. O., Ergoren M. C., et al.
Molecular Genetics and Genomic Medicine, vol.11, no.12, 2023 (SCI-Expanded)

IX. **Perception and management of cancer predisposition in pediatric cancer centers: A European-wide questionnaire-based survey.**
Lazic J., Haas O. A., Özbek U., Ripperger T., Byrjalsen A., Te Kronnie G., Sayitoğlu M., Ng Ö., Agaoglu N. B., Erbilgin Y., et al.
Pediatric blood & cancer, vol.70, no.5, 2023 (SCI-Expanded)

X. **Impact of TP53 gene variants on prognosis and survival of childhood acute lymphoblastic leukemia.**
Firtina S., Erbilgin Y., Hatirnaz Ng Ö., Karaman S., Karakas Z., Celkan T. T., Gelen S. A., Yildirmak Y., Ozbek U., Sayitoglu M.

Scandinavian journal of clinical and laboratory investigation, vol.83, no.3, pp.187-193, 2023 (SCI-Expanded)

XI. **Obstacles and expectations of rare disease patients and their families in Turkiye: ISTisNA project survey results**
Hatirnaz Ng Ö., Sahin I., Erbilgin Y., Ozdemir Ö., Yucesan E., Erturk N., Yemenici M., Akgun Dogan Ö., Ugur Iseri S. A., Satman I., et al.
FRONTIERS IN PUBLIC HEALTH, vol.10, 2023 (SCI-Expanded)

XII. **Concurrent Pathogenic Variants of BRCA1, MUTYH and CHEK2 in a Hereditary Cancer Family**
Agaoglu N. B., HATIRNAZ NG Ö., Unal B., AKGÜN DOĞAN Ö., Amanvermez U., Yildiz J., Doganay L., Ghazani A. A., Rana H. Q.
CANCER GENETICS, vol.268-269, pp.128-136, 2022 (SCI-Expanded)

XIII. **Tackling TKI resistance in AML: A commentary on "Inhibition of BCL2A1 by STAT5 inactivation overcomes resistance to targeted therapies of FLT3-ITD/D835 mutant AML." by Yamatani et al.**
Hatırnaz Ng Ö., Eşkazan A. E.
Translational oncology, vol.19, pp.101394, 2022 (SCI-Expanded)

XIV. **Determining T and B Cell development by TREC/KREC analysis in primary immunodeficiency patients and healthy controls**
Senturk G., Ng Y. Y., Eltan S. B., Baser D., Ogulur I., Altindirek D., Firtina S., Yilmaz H., Kocamis B., Kiykim A., et al.
SCANDINAVIAN JOURNAL OF IMMUNOLOGY, vol.95, 2022 (SCI-Expanded)

XV. **Primary antibody deficiencies in Turkey: molecular and clinical aspects**
Firtina S., Ng Y. Y., HATIRNAZ NG Ö., Kiykim A., Ozek E. Y., Kara M., AYDINER E., Nepesov S., Camcioglu Y., Sayar E. H., et al.
IMMUNOLOGIC RESEARCH, vol.70, no.1, pp.44-55, 2022 (SCI-Expanded)

XVI. **Zinc finger protein 384 (ZNF384) impact on childhood mixed phenotype acute leukemia and B-cell precursor acute lymphoblastic leukemia**
Sudutan T., ERBİLGİN Y., HATIRNAZ NG Ö., KARAMAN S., KARAKAŞ Z., Kucukcankurt F., Celkan T., Timur C., Ozdemir G. N., Hacisalihoglu S., et al.
LEUKEMIA & LYMPHOMA, vol.63, no.12, pp.2931-2939, 2022 (SCI-Expanded)

XVII. **Mutational landscape of SARS-CoV-2 genome in Turkey and impact of mutations on spike protein structure.**
Hatirnaz N., Akyoney S., Sahin I., Soykam H., Bayram A., Ozdemir Ö., Kancagi D., Sir K., Yurtsever B., Kocagoz A., et al.
PloS one, vol.16, no.12, 2021 (SCI-Expanded)

XVIII. **Prognostic evidence of LEF1 isoforms in childhood acute lymphoblastic leukemia.**
ERBİLGİN Y., Ng Ö., Can I., Firtina S., Kucukcankurt F., KARAMAN S., KARAKAŞ Z., Celkan T. T., ZENGİN E., AYLAN GELEN S., et al.
International journal of laboratory hematology, vol.43, no.5, pp.1093-1103, 2021 (SCI-Expanded)

XIX. **Gamma-irradiated SARS-CoV-2 vaccine candidate, OZG-38.61.3, confers protection from SARS-CoV-2 challenge in human ACEII-transgenic mice.**
Turan R. D., Tastan C., Kancagi D. D., Yurtsever B., Karakus G. S., Ozer S., Abanuz S., Cakirsoy D., TÜMENTEMUR G., Demir S., et al.
Scientific reports, vol.11, no.1, pp.15799, 2021 (SCI-Expanded)

XX. **Preclinical efficacy and safety analysis of gamma-irradiated inactivated SARS-CoV-2 vaccine candidates**
Sir Karakus G., Tastan C., Dilek Kancagi D., Yurtsever B., Tumentemur G., Demir S., Turan R. D., Abanuz S., Cakirsoy D., Seyis U., et al.
SCIENTIFIC REPORTS, vol.11, no.1, 2021 (SCI-Expanded)

XXI. **Mutational landscape of severe combined immunodeficiency patients from Turkey**
Çekiç Ş., Ng Y. Y., Ng Ö., Kıykım A., Özen A. O., Özen A. O., Özen A. O., Özen A. O., Özen A. O., Torun S. H., et al.
INTERNATIONAL JOURNAL OF IMMUNOGENETICS, vol.47, no.6, pp.529-538, 2020 (SCI-Expanded)

XXII. **The potential protective roles of zinc, selenium and glutathione on hypoxia-induced TRPM2 channel activation in transfected HEK293 cells**
Ergun D. D., Dursun S., PASTACI ÖZSOBACI N., HATIRNAZ NG Ö., NAZIROĞLU M., ÖZÇELİK D.

JOURNAL OF RECEPTORS AND SIGNAL TRANSDUCTION, vol.40, no.6, pp.521-530, 2020 (SCI-Expanded)

XXIII. **Copy-number variations in adult patients with chronic immune thrombocytopenia.**
YÜCESAN E., Ng Ö., Yalniz F. F., Yilmaz H., SALİHOĞLU A., Sudutan T., Eskazan A. E., Ongoren S., Baslar Z., Soysal T., et al.
Expert review of hematology, vol.13, no.11, pp.1277-1287, 2020 (SCI-Expanded)

XXIV. **Hydrogen Sulphide and Nitric Oxide Cooperate in Cardioprotection Against Ischemia/Reperfusion Injury in Isolated Rat Heart.**
ÜSTÜNOVA S., TAKIR S., YILMAZER N., Bulut H., ALTINDİREK D., HATIRNAZ NG Ö., Tansel C. D., Dogan B. S. U., ÖZBEK U., ARMUTAK E. İ., et al.
In vivo (Athens, Greece), vol.34, no.5, pp.2507-2516, 2020 (SCI-Expanded)

XXV. **Lymphoma Predisposing Gene in an Extended Family: CD70 Signaling Defect**
Khodzhaev K., Bay S. B., Kebudi R., ALTINDİREK D., Kaya A., Erbilgin Y., HATIRNAZ NG Ö., KIYKIM A., Erol F. C., Sen Zengin F., et al.
JOURNAL OF CLINICAL IMMUNOLOGY, vol.40, no.6, pp.883-892, 2020 (SCI-Expanded)

XXVI. **PTEN and AKT1 Variations in Childhood T-Cell Acute Lymphoblastic Leukemia**
Kucukcankurt F., Erbilgin Y., Firtina S., Hatirnaz Ö., Karakas Z., Celkan T., Unuvar A., Ozbek U., Sayitoglu M.
TURKISH JOURNAL OF HEMATOLOGY, vol.37, no.2, pp.98-103, 2020 (SCI-Expanded)

XXVII. **Prognostic gene alterations and clonal changes in childhood B-ALL.**
ERBİLGİN Y., Firtina S., Mercan S., Ng Ö., KARAMAN S., Tasar O., KARAKAŞ Z., Celkan T. T., Zenging E., Sarperg N., et al.
Leukemia research, vol.83, pp.106159, 2019 (SCI-Expanded)

XXVIII. **Deep sequencing of BCR-ABL1 kinase domain mutations in chronic myeloid leukemia patients with resistance to tyrosine kinase inhibitors.**
ERBİLGİN Y., Eskazan A. E., HATIRNAZ NG Ö., SALİHOĞLU A., ELVERDİ T., Firtina S., Tasar O., Mercan S., Sisko S., Khodzhaev K., et al.
Leukemia & lymphoma, vol.60, no.1, pp.200-207, 2019 (SCI-Expanded)

XXIX. **A novel pathogenic frameshift variant of CD3E gene in two T-B+ NK+ SCID patients from Turkey.**
Firtina S., Ng Y. Y., Ng Ö., Nepesov S., Yesilbas O., Kilercik M., Burtecene N., Cinar S., Camcioglu Y., ÖZBEK U., et al.
Immunogenetics, vol.69, no.10, pp.653-659, 2017 (SCI-Expanded)

XXX. **Dysregulation of the DKK1 gene in pediatric B-cell acute lymphoblastic leukemia**
Firtina S., Hatirnaz Ng Ö., Erbilgin Y., Ozbek U., Sayitoglu M.
TURKISH JOURNAL OF MEDICAL SCIENCES, vol.47, no.1, pp.357-363, 2017 (SCI-Expanded)

XXXI. **A Possible Role for WNT5A Hypermethylation in Pediatric Acute Lymphoblastic Leukemia**
HATIRNAZ NG Ö., Firtina S., Can I., KARAKAŞ Z., Agaoglu L., DOĞRU Ö., Celkan T., Akcay A., Yildirmak Y., Timur C., et al.
TURKISH JOURNAL OF HEMATOLOGY, vol.32, no.2, pp.127-135, 2015 (SCI-Expanded)

XXXII. **Deregulated WNT signaling in childhood T-cell acute lymphoblastic leukemia**
HATIRNAZ NG Ö., ERBİLGİN Y., Firtina S., Celkan T., KARAKAŞ Z., Aydogan G., Turkkan E., Yildirmak Y., Timur C., ZENGİN E., et al.
BLOOD CANCER JOURNAL, vol.4, 2014 (SCI-Expanded)

XXXIII. **LOCAL RENIN-ANGIOTENSIN SYSTEM IN NORMAL HEMATOPOIETIC AND MULTIPLE MYELOMA-RELATED PROGENITOR CELLS**
Haznedaroglu I., Uz B., Ozcebe O., Buyukasik Y., Goker H., Aksu S., Sayinalp N., Tatonyan S., Sayitoglu M., Erbilgin Y., et al.
HAEMATOLOGICA, vol.98, pp.768, 2013 (SCI-Expanded)

XXXIV. **Identification of Interconnected Markers for T-Cell Acute Lymphoblastic Leukemia**
Maiorov E. G., Keskin O., Ng Ö., Ozbek U., Gursoy A.
BIOMED RESEARCH INTERNATIONAL, 2013 (SCI-Expanded)

XXXV. **Upregulation of T-Cell-Specific Transcription Factor Expression in Pediatric T-Cell Acute Lymphoblastic Leukemia (T-ALL)**
SAYİTOĞLU M., ERBİLGİN Y., HATIRNAZ NG Ö., Yildiz I., Celkan T., Anak S., Devecioglu O., Aydogan G., Karaman S.,

SARPER N., et al.
TURKISH JOURNAL OF HEMATOLOGY, vol.29, no.4, pp.325-333, 2012 (SCI-Expanded)

XXXVI. **Genetic alterations in members of the Wnt pathway in acute leukemia**
Erbilgin Y., Ng Ö., Mavi N., Ozbek U., Sayitoglu M.
Leukemia and Lymphoma, vol.53, no.3, pp.508-510, 2012 (SCI-Expanded)

XXXVII. **Definition of C282Y mutation in a hereditary hemochromatosis family from Turkey**
Yoenal O., Hatirnaz Ö., Akyuez F., Koroglu G., Ozbeik U., Cefle K., Mungan Z.
Turkish Journal of Gastroenterology, vol.18, no.1, pp.53-57, 2007 (SCI-Expanded)

XXXVIII. **HFE gene mutation, chronic liver disease, and iron overload in Turkey**
Yoenal O., Hatirnaz Ö., Akyuez F., Oezbek U., Demir K., Kaymakoglu S., Oekten A., Mungan Z.
Digestive Diseases and Sciences, vol.52, no.11, pp.3298-3302, 2007 (SCI-Expanded)

XXXIX. **The SOCS-1 gene methylation in chronic myeloid leukemia patients**
Hatirnaz M., Ure U., Ar C., Akyerli C., Soysal T., Ferhanoglu B., Oezcelik T., Ozbek U.
American Journal of Hematology, vol.82, no.8, pp.729-730, 2007 (SCI-Expanded)

## Supported Projects

Hatırnaz Ng Ö., Açan Ö. U., TUBITAK Project, Kanser Hücrelerinde Hibrit Epitel-Mezenkimal Geçiş Durumlarının Karakterizasyonu ve Bu Hibrit Durumları Hedefleyen İlaç Adayı Moleküllerin Belirlenmesi, 2022 - 2025

BAYRAM AKÇAPINAR G., DOĞAN T., Bilgüvar K., HATIRNAZ NG Ö., ÖZBEK U., AKGÜN DOĞAN Ö., TUBITAK Project, Deep-CP: Development of a Deep Learning Variant Pathogenicity Prediction Tool using AlphaFold for Cerebral Palsy , 2022 - 2025

Akgün Doğan Ö., Özbek U., Hatırnaz Ng Ö., Alanay Y., Development Agency, İStanbul Tanısız ve NAdir Hastalıklara Çözüm Platformu-İSTisNA, 2022 - 2024

Alanay Y., Özbek U., Hatırnaz Ng Ö., Akgün Doğan Ö., Özdemir Ö., Çıtak A., Korkmaz Toygar A., Beken S., Kazancı E., Demirel A., et al., Project Supported by Higher Education Institutions, Yenidoğan ve Çocuk Yoğun Bakım Ünitesinde (YYBÜ/ÇYBÜ) Hızla Kötüleşen Kritik Yenidoğan ve Süt Çocuklarında Hızlı Yeni Nesil Dizileme ile Genetik Tanı, 2022 - 2024

HATIRNAZ NG Ö., ÖZDEMİR Ö., ÖZBEK U., TUBITAK Project, SARS-CoV-2 enfeksiyonuna yönelik peptid konjuge modifiye antisense morfolino oligomer tabanlı tedavi geliştirilmesi, 2021 - 2024

Akgün Doğan Ö., Alanay Y., Hatırnaz Ng Ö., Açıkel Elmas M., Project Supported by Higher Education Institutions, "Herediter Spastik Paraparezili Bir Ailede Klinik İnceleme ve ERLIN1 Geninin Hastalık Patofizyolojisindeki Yerinin Aydınlatılması", 2022 - 2023

Hatırnaz Ng Ö., Özbek U., Sayitoğlu M., Ng Y. Y., Kıykım A., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), X'e Bağlı Agamaglobulinemi'de Lentiviral Gen Terapinin Preklinik Uygulamaları, 2021 - 2022

Hatırnaz Ng Ö., Gezen Ak D., Dursun E., Çine N., TUBITAK Project, Nörodejenerasyonun ana patolojik bileşenlerinden amiloid beta 1-42 ve alfa sinükleinin, mitokondrial DNA tarafından kodlanan genlerin transkripsiyonları üzerine etkilerinin, DNA, RNA ve protein etkileşimleri açısından araştırılması -, 2020 - 2022

Hatırnaz Ng Ö., Sayitoğlu M., Özbek U., Çine N., Canpolat C., Ministry of Health, TÜSEB Bireysel ve Dönüşümsel Tıp Alanındaki Uygulamalı Proje Çağrısı: Akut lenfoblastik lösemi, 2020 - 2021

Hatırnaz Ng Ö., Özbek U., Alanay Y., Project Supported by Higher Education Institutions, Albinizm Hastalıklarında gen varyantlarının ekzom analizi ile belirlenmesi, 2020 - 2021

Hatırnaz Ng Ö., Özbek U., Alanay Y., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Bireysel ve Dönüşümsel Tıp Alanındaki Uygulamalı Proje Çağrısı: Albinizm, 2019 - 2021

Özbek U., Hatırnaz Ng Ö., Alanay Y., Development Agency, İSTisNA – İStanbul Tanısız ve NAdir Hastalıklara Çözüm Platformu Fizibilite Projesi, 2019 - 2021

Özbek U., Hatırnaz Ng Ö., Alanay Y., Project Supported by Higher Education Institutions, Genetic predisposition to leukemia and lymphoma, 2019 - 2020

## Congress and Symposium Activities

Ulusal Hematoloji Kongresi, Working Group, Antalya, Turkey, 2024
şıl Berat Barlan Akademisi DOĞUŞTAN BAĞIŞIKLIK KUSURLARI ULUSLARARASI USTALIK OKULU, Invited Speaker, İzmir, Turkey, 2024
Ulusal Hematoloji Kongresi, Working Group, Antalya, Turkey, 2023
Nadir ve Tanısız Hastalıkların Çözümünde Kullanılacak Stratejiler, Genomik Yaklaşımlar ve Veri Analizleri Eğitimi, Moderator, İstanbul, Turkey, 2023
Undiagnosed Diseases Network International (UDNI) Hackathon, Attendee, Stockholm, Sweden, 2023
Molecular Biology and Genetics Departmental Seminar Series, Invited Speaker, İstanbul, Turkey, 2023
European Leukemia Net, Working Group, Mannheim, Germany, 2023
Nadir Hastalıklar Günü Etkinliği, Moderator, İstanbul, Turkey, 2023
Orphanet Nomenklatürü Eğitimi, Moderator, İstanbul, Turkey, 2023
EJP RD: 4th General Assembly and Consortium meeting , Working Group, Porto, Portugal, 2022