

Lect. NEVİN BELDER

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAQ-2166-2021

ScopusID: 56156580200

Yoksis Researcher ID: 304943

Biography

Dr. Nevin Belder is a Research Associate Scientist at Ankara University Biotechnology Institute. Her major research interests include the discovery of new prognostic and diagnostic biomarkers and identifying the central molecular causes of cancer, especially colorectal cancer. Most of her work is in cancer genomics, transcriptomics, and bioinformatics, with the aim of developing predictors of therapeutic response and prognosis. She worked on various projects aimed at determining novel diagnostic and prognostic biomarkers for cancer, using data obtained from high-throughput genome, methylome, and transcriptome analyses during her Ph.D. Dr. Nevin also gained experience in the role of long noncoding RNAs responsible for tamoxifen resistance in ER α -positive breast cancer during her post-doc position.

Dr. Belder has been leading her own research group at Ankara University Biotechnology Institute, Systems Biotechnology Advanced Research Unit (SISBIOTEK), since 2022. The main focus of Belder's laboratory is elucidating the pathological mechanisms of tumor initiation and progression to identify novel treatment strategies, prognostic, and predictive biomarkers using systems biology approaches. Her research group is also interested in exploring cell-cell communications via exosomes and their functional role in cancer.

Education Information

Doctorate, Ankara University, Biyoteknoloji Enstitüsü, Temel Biyoteknoloji (Dr), Turkey 2007 - 2013

Postgraduate, Ankara University, Sağlık Bilimleri Enstitüsü, Farmakoloji (Yl) (Tezli), Turkey 2005 - 2007

Undergraduate, Ankara University, Fen Fakültesi, Biyoloji Bölümü, Turkey 2000 - 2004

Dissertations

Doctorate, Sporadik kolorektal kanser vakalarında genom ebadında kopya sayısı değişimlerinin ve transkriptom profilinin belirlenmesi ile kanserin gelişmesinde ve ilerlemesinde etken yeni genlerin tanımlanması, Ankara University, Biyoteknoloji Enstitüsü, Temel Biyoteknoloji (Dr), 2013

Postgraduate, Sıçanlarda İleri Glikasyon Son Ürünleri ile İndüklenen Kardiyovasküler Bozukluklar Üzerine Kısa Süreli

Research Areas

Medicine, Life Sciences, Bioinformatics, Molecular Biology and Genetics, Molecular Biology of Cancer, Health Sciences, Fundamental Medical Sciences, Natural Sciences

Academic Titles / Tasks

Lecturer, Ankara University, Biyoteknoloji Enstitüsü, Biyoteknoloji Anabilim Dalı, 2021 - Continues

Lecturer, Hacettepe University, Nörolojik Bilimler Ve Psikiyatri Enstitüsü, 2019 - 2021

Courses

Extracellular vesicles: from biology to biomedical applications , Postgraduate, 2022 - 2023

Advising Theses

Özdağ Sevgili H., Belder N., DDIT4 Gen Ekspresyonunun Kolorektal Kanserde Prognostik ve Terapötik Öneminin Aydınlatılması, Postgraduate, F.GÜLCE(Student), 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Reduced folate carrier 1 is present in retinal microvessels and crucial for the inner blood retinal barrier integrity**
Gurler G., BELDER N., BEKER M. Ç., Sever-Bahcekapili M., Uruk G., Kilic E., YEMİŞÇİ ÖZKAN M.
Fluids and Barriers of the CNS, vol.20, no.1, 2023 (SCI-Expanded)
- II. **Overview of extracellular vesicle characterization techniques and introduction to combined reflectance and fluorescence confocal microscopy to distinguish extracellular vesicle subpopulations**
Bagci C., SEVER BAHÇEKAPILI M., BELDER N., Bennett A. P. S., ERDENER Ş. E., DALKARA T.
NEUROPHOTONICS, vol.9, no.2, 2022 (SCI-Expanded)
- III. **A Stemness and EMT Based Gene Expression Signature Identifies Phenotypic Plasticity and is A Predictive but Not Prognostic Biomarker for Breast Cancer**
Akbar M. W., Isbilen M., BELDER N., Demirkol Canlı S., Kucukkaraduman B., Turk C., ŞAHİN Ö., GÜRE A. O.
JOURNAL OF CANCER, vol.11, no.4, pp.949-961, 2020 (SCI-Expanded)
- IV. **Targeting breast cancer stem cells**
Akbar M. W., Isbilen M., BELDER N., Demirkol S., Kucukkaraduman B., Sahin O., Gure A. O.
FEBS OPEN BIO, vol.9, pp.320-321, 2019 (SCI-Expanded)
- V. **Reactivation of cAMP Pathway by PDE4D Inhibition Represents a Novel Druggable Axis for Overcoming Tamoxifen Resistance in ER-positive Breast Cancer**
Mishra R. R., BELDER N., Ansari S. A., Kayhan M., Bal H., Raza U., Ersan P. G., Tokat U. M., Eyupoglu E., Saatci O., et al.
CLINICAL CANCER RESEARCH, vol.24, no.8, pp.1987-2001, 2018 (SCI-Expanded)
- VI. **The effect of biological heterogeneity on R-CHOP treatment outcome in diffuse large B-cell lymphoma across five international regions**
Carr R., ÖZDAĞ SEVGİLİ H., Tekin N., Morris T., Conget P., Bruna F., Timar B., Gagyi E., Basak R., Naik O., et al.
LEUKEMIA & LYMPHOMA, vol.58, no.5, pp.1178-1183, 2017 (SCI-Expanded)

- VII. **Protocol for qRT-PCR analysis from formalin fixed paraffin embedded tissue sections from diffuse large b-cell lymphoma: Validation of the six-gene predictor score**
 Tekin N., Omidvar N., Morris T. P., Conget P., Bruna F., Timar B., Gagyi E., Basak R., Naik O., Auewarkul C., et al.
ONCOTARGET, vol.7, no.50, pp.83319-83329, 2016 (SCI-Expanded)
- VIII. **From RNA isolation to microarray analysis: Comparison of methods in FFPE tissues.**
 BELDER N., Coskun Ö., DOĞANAY ERDOĞAN B., İLK DAĞ Ö., SAVAŞ B., ENSARI A., ÖZDAĞ SEVGİLİ H.
Pathology, research and practice, vol.212, no.8, pp.678-85, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Optimization of gene expression microarray protocol for formalin-fixed paraffin-embedded tissues.**
 BELDER N., Coskun Ö., DOĞANAY ERDOĞAN B., SAVAŞ B., ENSARI A., ÖZDAĞ SEVGİLİ H.
Genomics data, vol.7, pp.303-6, 2016 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Increased Expression of DNA Damage Inducible Transcript 4 Gene is Associated with Poor Prognosis and “Right-Sidedness” in Colorectal Cancer**
 demir f. g., TAMAM S., ÇULCU S., SAVAŞ B., AKBULUT H., ÖZDAĞ SEVGİLİ H., BELDER N.
 How to bring basic science discoveries to the clinic, 27 February 2024
- II. **INHBA is a potential biomarker and therapeutic target for patients with colorectal cancer**
 BELDER N., DEMİRKOL CANLI S., TAMAM S., ÇULCU S., SAVAŞ B., AKBULUT H.
 November 29 – December 02, 2023 9 th International BAU Drug Design Congress, 29 November - 02 December 2023
- III. **İndirgenmiş folat taşıyıcısı 1 kan-beyin bariyeri bütünlüğünü düzenlemektedir**
 Gürler G., Soylu K. O., SEVER BAHÇEKAPILI M., BELDER N., KARATAŞ KURŞUN H., Bolbos R., Wiart M., Chauveau F., YEMİŞÇİ ÖZKAN M.
 20. Ulusal Sinirbilim Kongresi, Turkey, 19 October 2022
- IV. **MOLECULAR BIOMARKERS AND PRECISION MEDICINE FOR THE MANAGEMENT OF COLORECTAL CANCER**
 Belder N.
 VI-INTERNATIONAL EUROPEAN CONFERENCE ON INTERDISCIPLINARY SCIENTIFIC RESEARCH, Bucuresti, Romania, 26 - 27 August 2022, pp.142
- V. **Integrated analysis of copy number variation and genome-wide expression profiling in colorectal cancer**
 BELDER N., Sümer Çelebi H., Sümer Çelebi H., SAVAŞ B., ENSARI A., KUZU M. A., ÖZDAĞ SEVGİLİ H.
 2nd International Multidisciplinary Cancer Research Congress, Giresun, Turkey, 21 July 2022
- VI. **MODULATING REDUCED FOLATE CARRIER 1 GENE EXPRESSION CHANGES BLOOD-RETINA BARRIER IN HEALTHY AND ISCHEMIC MICE RETINA**
 Gürler G., BELDER N., Beker M., SEVER BAHÇEKAPILI M., Uruk G., KILIÇ E., YEMİŞÇİ ÖZKAN M.
 FENS Forum 2022, Paris, France, 09 July 2022
- VII. **CNS CAPILLARY PERICYTES EXPRESS mRNA OF CARDINAL CONTRACTILE PROTEINS, α -SMA AND MYH11: AN IN-SITU HYBRIDIZATION STUDY**
 Başaran M. D., BELDER N., KÜRELİ G., ERDENER Ş. E., DALKARA T.
 FENS Forum 2022, Paris, France, 09 July 2022
- VIII. **Reduced Folate Carrier-1 is expressed in cerebral pericytes and might have a role in ischemia**
 Gürler G., BELDER N., SEVER BAHÇEKAPILI M., Uruk G., KARATAŞ KURŞUN H., YEMİŞÇİ ÖZKAN M.
 BRAIN & BRAIN PET 2022, Glasgow, England, 29 May 2022, pp.105
- IX. **The Role of NUDT6 and S100A9 as New Molecular Players in Hippocampus, Basolateral Amygdala**

- and Prefrontal Cortex in a Post-Traumatic Stress Disorder (PTSD) Model**
Uzay B., Belder N., Eren Koçak E.
2022 SOBP, Louisiana, United States Of America, 28 April 2022, pp.337-338
- X. **İndirgenmiş Folat Taşıyıcısı 1 Proteini Kan-Retina Bariyerinde İfade Edilmektedir ve Retinal İskemide Rolü Olabilir**
Gürler G., Uruk G., BELDER N., YEMİŞÇİ ÖZKAN M.
19. Ulusal Sinirbilim Kongresi, 21 November 2021
- XI. **Identification of the Cellular Origin of Brain-Derived Exosomes by Combined Reflectance and Fluorescence Microscopy**
BAĞCI C., BELDER N., SEVER BAHÇEKAPILI M., ERDENER S. E., DALKARA T.
Neuroscience 2021, 08 November 2021
- XII. **BIOINFORMATICS ANALYSIS REVEALS CYCLIN-DEPENDENT KINASE-6 AS A CANDIDATE PROGNOSTIC BIOMARKER IN COLORECTAL CANCER**
BELDER N.
1. ULUSLARARASI ONKOLOJIK ACILLER KONGRESI, 07 October 2021
- XIII. **Identification of a potential four-gene signature-based risk assessment model to predict prognosis in colorectal cancer patients**
BELDER N., Chariyeva S., Kawalya H., Abacı E. E., Namood-e S., SAVAŞ B., ENSARI A., KUZU M. A., ÖZDAĞ SEVGİLİ H.
EACR 2021 Vİrtual Congress, United States Of America, 09 June 2021
- XIV. **IDENTIFICATION OF FOUR KEY GENES AS PROMISING PROGNOSTIC BIOMARKERS FOR COLORECTAL CANCER USING INTEGRATIVE ANALYSIS**
BELDER N., Abacı E. E., Kawalya H., Namood-e S., SAVAŞ B., ENSARI A., KUZU M. A., ÖZDAĞ SEVGİLİ H.
8th Multidisciplinary Cancer Research Congress, 15 January 2021
- XV. **Reduced Folate Carrier 1 is Present in Cerebral and Retinal Microvessels**
Gürler G., Uruk G., BELDER N., YEMİŞÇİ ÖZKAN M.
SfN Global Connectom, 11 January 2021
- XVI. **SPORADİK KOLOREKTAL KANSERDE GLOBAL miRNA ve mRNA İFADE PROFİLLERİNİN ENTEGRASYONU**
BELDER N., ÖZDAĞ H., SAVAŞ B., ENSARI A., KUZU M. A., abacı e. e., Sahar N.
XIII. Ulusal Tibbi Genetik Kongresi, Turkey, 07 November 2019 - 11 November 2018
- XVII. **Trombospondin-2 geni yüksek ifadesinin kolorektal kanserde prognostik etkisi vardır**
ÖZDAĞ H., BELDER N., abacı e. e., Kawalya H., Namode S., SAVAŞ B., ENSARI A., KUZU M. A.
XVI. Tibbi Biyoloji ve Genetik Kongresi, 27 - 30 October 2019
- XVIII. **Resolution of neuroinflammation triggered by cortical spreading depression**
BELDER N., DALKARA T., DEMİR B. N., KARATAŞ KURŞUN H., EREN KOÇAK E., YEMİŞÇİ ÖZKAN M., kaya z., yılmaz özcan s.
Society for Neurosciency, 19 - 23 October 2019
- XIX. **Overcoming tamoxifen resistance and inhibiting metastatic recurrence in estrogen receptor-positive breast cancer**
Ersan P. G., Saatci O., Tarman O., Mishra R., BELDER N., Tokat U. M., Riazalhosseini Y., Sahin O.
Annual Meeting of the American-Association-for-Cancer-Research (AACR), Georgia, United States Of America, 29 March - 03 April 2019, vol.79
- XX. **Targeting breast cancer stem cells**
Akbar M. W., İşbilen M., BELDER N., DEMİR KOL CANLI S., Küçükkaraduman B., ŞAHİN Ö., GÜRE A. O.
The 45th FEBS Congress, Krakow, Poland, 6 - 11 July 2019, vol.9, pp.320-321
- XXI. **Targeting long non-coding RNAs (lncRNAs) to overcome tamoxifen resistance in Estrogen Receptor alpha (ER α) positive breast cancer**
ŞAHİN Ö., BELDER N., Tarman O., Bal H., Saatçi Ö., Ersan P., Tokat Ü. M., Hu X., Xu P., Riazalhosseini Y.
6th International BAU Drug Design Congress, 13 - 15 December 2018
- XXII. **Genomic meta-analysis and discovery of new biomarkers in colorectal cancer**
Kawalya H., BELDER N., KUZU M. A., Savas B., ENSARI A., ÖZDAĞ SEVGİLİ H.

- 41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.15
- XXIII. Association between loss of 18q21, gain of 20q13.33 and progression in sporadic colorectal cancer**
 BELDER N., Savas B., KUZU M. A., Pak I., Celebi H. S., ENSARI A., ÖZDAĞ SEVGİLİ H.
 41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.142-143
- XXIV. A meta-analysis for the identification of common microRNA signatures in colorectal cancer**
 Sahar N., BELDER N., ÖZDAĞ SEVGİLİ H.
 41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.281
- XXV. DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL) STUDY REVEALS BIOLOGICAL HETEROGENEITY BETWEEN ETHNICALLY DIVERSE COUNTRIES; VALIDATION OF 6-GENE PROGNOSTIC SCORE IN AN INTERNATIONAL COHORT**
 Tekin N., Omidvar N., Morris T., Timar B., Gagyi E., Conget P., Bruna F., Basak R., Naik O., Auewarakul C. U., et al.
 21st Congress of the European-Hematology-Association, Copenhagen, Denmark, 9 - 12 June 2016, vol.101, pp.579-580
- XXVI. Second step of genome-wide association study: Validation of 50 single nucleotide polymorphisms associated with sporadic colorectal cancer in Turkish population**
 Cumaogullari O., Dag O. I., Tekin N., Rajabli F., KUZU M. A., Dungul D. C., BELDER N., ÖZDAĞ SEVGİLİ H.
 40th Congress of the Federation-of-European-Biochemical-Societies (FEBS) - The Biochemical Basis of Life, Berlin, Germany, 4 - 09 July 2015, vol.282, pp.394
- XXVII. Transcriptome profiling of colorectal cancer**
 BELDER N., SAVAŞ B., ENSARI A., KUZU M. A., ÖZDAĞ SEVGİLİ H.
 European Biotechnology Congress, Bratislava, Slovakia, 16 - 18 May 2013, vol.24

Supported Projects

- Belder N., TUBITAK Project, Sisplatin Dirençli İnsan Over Kanseri Hücrelerinde Biyoaktif PAN/PVA/PLLA Nanofiber Kompleksine Bağlı Bakırın Cuproptosis Aracılı Hücre Ölümüne Etkisinin Araştırılması, 2023 - 2026
- Çulcu S., Tamam S., Belder N., Akbulut H., Özdağ Sevgili H., Demirkol Canlı S., Dalva Aydemir S., Göktuna S. İ., Yılmaz E., TUBITAK Project, INHBA ve DDIT4 Genlerinin Kolorektal Kanserde Diyagnostik, Prognostik ve Terapötik Potansiyelinin Değerlendirilmesi, 2022 - 2025
- Belder N., TUBITAK Project, Nöropsikiyatrik Hastalıkların Tanısı ve Mekanizmalarının Anlaşılması İçin Serumdan Beyin Kökenli Ekstraselüler Veziküllerin Ayrıştırılması ve Karakterizasyonu, 2021 - 2024
- Belder N., TÜBİTAK International Bilateral Joint Cooperation Program Project, İndirgenmiş Folat Taşıyıcısı 1'in Serebral ve Retinal Mikrodolaşımındaki Rolü, 2021 - 2023
- Belder N., TUBITAK Project, Merkezi Sinir Sistemi Perisitlerinde ?-Sma ve Myh11 için RNA in situ Hibridizasyon Tekniğinin Uygulanması, 2020 - 2021

Memberships / Tasks in Scientific Organizations

- EACR, Member, 2021 - Continues, England
- Moleküler Kanser Araştırma Derneği (MOKAD), Member, 2021 - Continues, Turkey
- Moleküler Biyoloji Derneği, Member, 2012 - Continues, Turkey
- TİBBİ BİYOLOJİ VE GENETİK DERNEĞİ , Member, 2011 - Continues, Turkey

Scientific Refereeing

European annals of dental sciences (Online), Other Indexed Journal, December 2022
WORLD JOURNAL OF GASTROENTEROLOGY, Journal Indexed in SCI-E, November 2022
WORLD JOURNAL OF GASTROENTEROLOGY, Journal Indexed in SCI-E, October 2022
International Journal of Electrical and Computer Engineering Systems, Journal Indexed in ESCI, August 2022
Medical records-international medical journal (Online), Other Indexed Journal, July 2022
WORLD JOURNAL OF CLINICAL CASES, Journal Indexed in SCI-E, February 2022
Project Supported by Higher Education Institutions, BAP Infrastructure, Hacettepe University, Turkey, February 2022
Project Supported by Higher Education Institutions, BAP Research Project, Hacettepe University, Turkey, February 2022

Metrics

Publication: 36
Citation (WoS): 81
Citation (Scopus): 88
H-Index (WoS): 5
H-Index (Scopus): 5

Congress and Symposium Activities

BİYOENFORMATİK GÜNLERİ V, Attendee, Ankara, Turkey, 2022