



**CURRICULUM VITAE**

Name and Surname: Nermin AKÇALI  
Date of Birth: 1989  
Academic Title: Assistant Professor  
Work Address:  
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Area of Expertise: Cytogenetic  
Genetic Disorders  
Genetics  
Medical Genetics  
Molecular Biology and Genetics  
Temel Bilimler > Yaşam Bilimleri > Moleküler Biyoloji ve Genetik > Genetik Ve Kalıtım

Degree	Department/Program	University	Year
Doctorate	TIBBİ GENETİK (DR)	Afyonkarahisar Health Sciences University	2022
Master's Degree	TIBBİ GENETİK (YL) (TEZLİ)	Afyonkarahisar Health Sciences University	2019
Master's Degree	TIBBİ GENETİK (YL) (TEZLİ) (TIP)	Afyon Kocatepe University	2018
Bachelor's Degree	BİYOLOJİ BÖLÜMÜ	Afyon Kocatepe University	2011

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):

Evaluation of Chromosomal Alterations Considered as Polymorphic Variants in Couples with Recurrent Pregnancy Loss

Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):

Analysis of Genetic Variations in Individuals with Neural Tube Defects

Position Title	Workplace	Year
Assistant Professor	Biruni University	2023-Continues

Roles in Projects:

Investigation of the Effects of High Fructose and Hyperbaric Oxygen Therapy (HBOT) on Methylation, Expression, and Protein Levels of the Mitochondrial ND5 Gene in Rat Liver (2025 - Continues)

Comparison of the Antifungal Effects of Garlic and Titanium Dioxide Nanoparticle-Based Mouthwashes and Their Impact on the Surface Properties of Denture Base Materials Produced by Different Manufacturing Methods (2024 - Continues)

Application of Exosomes Derived from Inula viscosa in Combination with Paclitaxel on MCF-7 Cell Line:

Investigation of Potential Anticancer Effects (Migration Inhibition, Apoptosis Induction, and Growth/Proliferation Inhibition) and the Role of miR-34a (2024 - Continues)

Integrated Cell and Genetic Infrastructure Development Project for Molecular Research (2024 - 2025)  
 Advanced Research Infrastructure Project for Cancer Studies Using Cell Culture and Plant Extracts (2024 - 2025)  
 Investigation of Genetic Data in Patients with Neural Tube Defects (2021 - 2023)  
 The Relationship Between the Kisspeptin Gene and Endometrial Polyps (2021 - 2022)  
 Investigation of the Anticancer Potential of Natural Compounds Isolated from the Afyonkarahisar Endemic Plant  
 Thermopsis turcica in Human Cancer Cell Lines (2015 - 2019)  
 Evaluation of Chromosomal Alterations Considered as Polymorphic Variants in Couples with Recurrent Pregnancy Loss (2017 - 2019)  
 Effect of Exogenous Lipoic Acid on NaCl-Induced Proteomic Changes in Canola (Brassica napus L.) Seedlings (2013 - 2014)

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Undergraduate and graduate level courses taught in the last two years (If offered, summer courses will also be added to the table):

Academic Year	Semester	Course Name	Weekly Hours		Number of Students
			Theoretical	Practical	
2024	Spring	Tıbbi Biyoloji ve Genetik			
2024	Spring	Klinik Genetik			
2024	Spring	Moleküler Biyoloji ve Genetikte Güncel Konular			
2024	Spring	Proteomik ve Genomik			
2024	Spring	Genetik Hastalıklarda Dismorfoloji			
2024	Spring	Gen Tedavi ve Uygulama Alanları			
2024	Spring	Tıbbi Genetik			
2024	Fall	Tıbbi Biyoloji ve Genetik			
2024	Fall	Klinik Genetik			
2024	Fall	Moleküler Biyoloji ve Genetikte Güncel Konular			
2024	Fall	Proteomik ve Genomik			
2024	Fall	Genetik Hastalıklarda Dismorfoloji			
2024	Fall	Gen Tedavi ve Uygulama Alanları			
2024	Fall	Tıbbi Genetik			

## **PUBLICATIONS**

### **A. Articles published in international peer-reviewed journals:**

- A1. "The functional correlation between mir-16-5p and BIRC5 gene in colorectal cancer: integrated analysis of transcriptomics and in vitro validation", Molecular Biology Reports, 2025.
- A2. "Whole exome-based variant profiling and functional network characterization in neural tube defects", Child's Nervous System, 2025.
- A3. "Mpox virus (MPXV): comprehensive analysis of pandemic risks, pathophysiology, treatments, and mRNA vaccine development", Naunyn-Schmiedeberg's Archives of Pharmacology, 2025.
- A4. "Enhancing the Chemosensitivity of MKN-45 Gastric Cancer Cells to Docetaxel via B7H6 Suppression: A Novel Therapeutic Strategy", Life, 2024.
- A5. "Analysis of the immunohistochemical and genetic expression pattern of kisspeptin in endometrial polyps", Ceska Gynekol, 2024.
- A6. "Analysis of the immunohistochemical and genetic expression pattern of kisspeptin in endometrial polyps Analýza imunohistochemického a genetického vzorce exprese kisspeptinu v endometriálních polypech", Ceska Gynekologie, 2024.
- A7. "Proteomic analysis of the anticancer effect of various extracts of endemic thermopsis turcica in human cervical cancer cells", Turkish Journal of Medical Sciences, 2020.
- A8. "Proteomic and biochemical responses of canola Brassica napus L. exposed to salinity stress and exogenous lipoic acid", JOURNAL OF PLANT PHYSIOLOGY, 2015.

### **B. Papers presented at international scientific meetings and published in proceedings:**

- B1. "Crispr/Cas9 İle Düzenlenmiş Kök Hücrelerin Hemofili A Hastalığının Tedavisindeki Potansiyeli", 14. Uluslararası Araştırmalar Kongresi (ICAR), 2024.
- B2. "Resveratrol'ün Epigenetik Yolakları Ve Meme Kanseri Üzerindeki Etkileri", 14. Uluslararası Araştırmalar Kongresi (ICAR), 2024.
- B3. "Epidemiological And Clinical Characteristics Of Children With Down Syndrome", 4th International Health Science and Life Congress, 2021.
- B4. "KANOLA (Brassica napus L.) ÇEŞİTLERİNİN TOHUM ÇİMLENMESİ ÜZERİNE TUZLULUK, SICAKLIK VE FOTOPERİYODUN ETKİLERİ", ULUSLARARASI KATILIMLI TÜRKİYE 5. TOHUMCULUK KONGRESİ, 2014.

**D. Articles published in national peer-reviewed journals:**

- D1. "Analysis Of Polymorphic Chromosome Variants In Couples With Recurrent Pregnancy Loss", Sağlık Bilimlerinde İleri Araştırmalar Dergisi, 2024.
- D2. "Advanced Parental Age Association With The Development Of Autism Spectrum Disorder Meta-Analysis", Biruni Health and Education Sciences Journal, 2024.
- D3. "Kromozom Polimorfizmleri İle İnfertilite Arasındaki İlişkinin Analizi", Afyon Kocatepe Üniversitesi Kocatepe Tıp Dergisi, 2023.
- D4. "Bitki Tuz Stresi Toleransında Salisilik Asit ve Poliaminler", Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, 2014.

**E. Papers presented at national scientific meetings and published in proceedings:**

- E1. "A Clinical Case of Trisomy X Syndrome", ULUSAL TIBBİ BİYOLOJİ VE GENETİK KONGRESİ, 2017.
- E2. "A case of down syndrome with hemihypertrophy", 15. ULUSAL TIBBİ BİYOLOJİ VE GENETİK KONGRESİ, 2017.
- E3. "Robertsonian translocation with 9. chromosome Pericentric inversion phenomenon that with recurrent pregnancy loss", 14. ULUSAL TIBBİ BİYOLOJİ VE GENETİK KONGRESİ, 2015.
- E4. "The Effect of Exogenous Lipoic Acid on NaCl-Induced Proteomic Changes in Canola (Brassica napus L.) Seedlings", 1.ULUSAL BİTKİ FİZYOLOJİSİ SEMPOZYUMU, 2015.
- E5. "The Effect of Lipoic Acid on Salt Tolerance of Canola (Brassica napus L.) Seedlings Under Salt Stress", 22. ULUSAL BİYOLOJİ KONGRESİ, 2014.