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EĞİTİM BİLGİLERİ

Derece	Üniversite	Bölüm	Yıl
Doktora	İstanbul Üniversitesi	Sinirbilim Anabilim Dalı	2014 - 2019
Lisans	Ankara Üniversitesi		2000 - 2005
Yüksek Lisans	Ankara Üniversitesi	Ankara Veteriner Pr.	2000 - 2005

ARAŞTIRMA ALANLARI

Sinirbilim, Kan beyin bariyeri, Spreading depolarization

AKADEMİK GÖREVLER

Görev	Üniversite	Alan	Yıl
Doktora sonrası araştırmacı	Harvard Üniversitesi	Tıp Fakültesi / Neurovascular Unite	2025 -
Doktor Öğretim Üyesi	Altınbaş Üniversitesi	Tıp Fakültesi Fizyoloji Bölümü	2021 -
Doktora sonrası araştırmacı	Koç Üniversitesi	Tıp Fakültesi Fizyoloji Bölümü	2018 - 2022

İDARİ GÖREVLER

Görev	Üniversite	Yıl
Laboratuvar Sorumlu Yöneticisi	Bogazici Üniversitesi	2010 - 2018

AKADEMİK VE MESLEKİ ÜYELİKLER

Kurum	Üyelik	Yıl
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ÜNİVERSİTE DIŞI DENEYİM

Ülke	Kurum	Görev	Yıl
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KİTAPLAR

Üst solunum yolu enfeksiyonları
TEMİZYÜREK ARZU
Kongre Yayınevi, 978-605-74070-1-6, 2022
Bilimsel Kitap | Bölüm(ler)

The role of antioxidants and oxidative stress in neurodegenerative diseases and aging
TEMİZYÜREK ARZU
İksad Yayınevi, -ISBN: 978-625-8377-34-7, 2022
Bilimsel Kitap | Bölüm(ler)

TEK SAĞLIK – 21. YÜZYILIN KARMAŞIK SAĞLIK SORUNLARIYLA YÜZLEŞMEK
Arzu Temizyurek, Adnan Serpen
DUVAR, 978-625-6945-00-5, 2024
Bilimsel Kitap | Bölüm(ler)

Current Trends in Neurosciences
Emir Kiraz, Arzu Temizyurek, Mehmet Kaya, Nadir Arıcan, Nurcan Orhan
İstanbul Üniversitesi Yayınevi, 978-605-07-1765-5, 2024
Bilimsel Kitap | Bölüm(ler)

MAKALELER

Targeting the blood-brain barrier disruption in hypertension by ALK5/TGF-B type I receptor inhibitor SB-431542 and dynamin inhibitor dynasore.

Muge Atis, Ugur Akcan, Canan U.Yılmaz, Deniz Altunsu, Ecem Ayvaz, Deniz Sertkaya, Arzu Temizyürek, Bulent Ahishali, Mehmet Kaya

Brain research, 2022

Uluslararası DOI: 10.1016/j.brainres.2022.148071

Blood-brain barrier targeted delivery of lacosamide-conjugated gold nanoparticles: Improving outcomes in absence seizures

Arzu Temizyürek, Canan U. Yılmaz, Serkan Emik, Nurcan Orhan, Muge Atis, Ugur Akcan, Nadir Arican, Mutlu Kucuk, Candan Gurses, Bulent Ahishali, Mehmet Kaya

Epilepsy Research, 2022

Uluslararası DOI: 10.1016/j.eplepsyres.2022.106939

Targeted delivery of lacosamide-conjugated gold nanoparticles into the brain in temporal lobe epilepsy in rats.

Canan Uğur Yılmaz, Serkan Emik, Nurcan Orhan, Arzu Temizyürek, Muge Atis, Ugur Akcan, Rouhollah Khodadust, Nadir Arican, Mutlu Kucuk, Candan Gurses, Bulent Ahishali, Mehmet Kaya

Life sciences, 2020

Uluslararası DOI: 10.1016/j.lfs.2020.118081

Effect of Probiotics on Parkinson's Disease Rating, Selected Gastrointestinal Measurements and Oxidative Stress Parameters in Parkinson's Disease: A Systematic Review of Randomized Controlled Trials

Elif Sina Atak, Dilara Yıldız, Rümeyşa, Rabia Kocatürk, Arzu Temizyürek, Öznur Özge Özcan, Türker Tekin Ergüze, Mesut Karahan, Nevzat Tarhan

International Journal of Neuroscience, 2021

Uluslararası DOI: DOI:https://doi.org/10.1080/00207454.2022.2079506

Use of Ketogenic Diet Therapy in Epilepsy with mitochondrial dysfunction:A Systematic and Critical Review

R. R. Kocatürk, A. Temizyürek, E. Reis, S. Tur, Ş. Yılmaz, H. Demirkaya, Ö. Ö. Özcan, M. Karahan

Biotechnologia Acta. , 2022

Uluslararası DOI: http://doi.org/10.15407/biotech15.02.013

Effect of Nutritional Supports on Malnutrition, Cognition, Function and Biomarkers of Alzheimer's Disease: A Systemic Review

Rümeyşa Rabia Kocatürk, Arzu Temizyürek, Öznur Özge Özcan, Türker Tekin Ergüzel, Mesut Karahan, Nevzat Tarhan

Basic and Clinical Neuroscience, 2022

Uluslararası DOI: 10.32598/bcn.2022.3665.1

Quetiapine Improves Sensorimotor Gating Deficit in A Sleep Deprivation-Induced Rat Model

Öznur Özge Özcan, Burcu Çevreli, Arzu Temizyürek, Mesut Karahan

Sleep and Biological Rhythms, 2023

Uluslararası DOI: 10.1007/s41105-023-00504-x

Therapeutic and prophylactic effects of fulvic acid on a breast cancer model established by MCF-7 Cell line in SCID mice

Osman Bilgin, Duygu Oran, Arzu Temizyürek, Atilla Çelik, Ertan Yavuz

European Journal of Cancer Care, 2024

Uluslararası DOI: https://doi.org/10.1155/2024/5871444

Effects of waiting time between trials and water temperature on cognitive functions, body temperature and body weight in rats in Morris water maze

Duygu Sultan Oran, Zeynep Yıldız, Arzu Temizyürek, Ayşin Selcan

Journal of Istanbul Veterinary Sciences. , 2022

Ulusal DOI: https://doi.org/10.30704/http-www-jivs-net.1115170

BİLDİRİLER

BİLDİRİLER

Blood brain barrier dynamics & anti-epileptogenic effects of antiepileptic drug-bound nanoparticle in WAG/Rij rats as a genetic absence epilepsy model

Temizyurek A., Canan Ugur Yilmaz, Serkan Emik, Nurcan Orhan, Muge Atis, Ugur Akcan, Nadir Arican, Bulent Ahishali, Mehmet Kaya

22nd International Symposium "Signal Transduction at the Blood-Brain Barriers", Würzburg Germany/ Book of abstracts,

[Uluslararası](#)

Blood-brain barrier dynamics of nanotechnological drug carriers in animal model of temporal lobe epilepsy

Canan Ugur Yılmaz, Nurcan Orhan, Arzu Temizyurek, Muge Atis, Ugur Akcan, Rouhollah Khodadust, Nadir Arican, Mutlu Kucuk, Candan Gurses, Bulent Ahishali, Serkan Emik, Mehmet Kaya

Fluids Barriers CNS . 2017 Oct 27;14(Suppl 2):27. doi: 10.1186/s12987-017-0071-4,

[Uluslararası](#)

IgG-conjugated gold nanoparticles restore blood-brain barrier damage in both in vitro and in vivo models of sepsis (Poster Presentation)

Esen F., Akcan U., Çavuşlar Ö., Orhun G., Ergin Ozcan P., Yağcı Acar H., Temizyürek A., Bakbak H., Altunsu D., Ayvaz E., Ahishali B., Kaya M.

23rd International Symposium "Signal Transduction at the Blood-Brain Barriers, Italy/ Book of abstracts,

[Uluslararası](#)

The role of calpain inhibitor-I in NF-κB pathway in an in vitro blood-brain barrier model under inflammatory conditions

Akbulak İ., Temizyürek A., Altunsu D., Ayvaz E., Ahishali B., Kaya M.

23rd International Symposium "Signal Transduction at the Blood-Brain Barriers", Italy / Book of abstracts,

[Uluslararası](#)

The effectiveness of antagonists of four histamine receptor types and inhibitor of RhoA in reversing in histamine-induced transient blood-brain barrier opening

Akcan U., Temizyurek A., Özen D., Şeker Polat F., Uğur Yılmaz C., Demirci G., Akbulak İ., Üzbe A.S., Üzbe P.P., Yağcı Acar F., Kaya M., Ahishali

23rd International Symposium "Signal Transduction at the Blood-Brain Barriers", Italy ,

[Uluslararası](#)

Nanoparticles as novel drug carrier systems in in-vivo blood brain barrier and cancer (xenograft) research / BUSHK

Arzu Temizyurek (Keynote speaker)

5th BUSHK International Conference "Contemporary Trends in Quality Healthcare", 1-11 June, 2023, Pakistan / Book of abstracts,

[Uluslararası](#)

The effect on FABP7 on BBB integrity in LPS-induced inflammation

Deniz Altunsu Kurt, Arzu Temizyürek, Ecem Ayvaz, Mehmet Kaya, Paulo Lizano, Bülent Ahishali

2024 Harvard Psychiatry Research Day , Boston, MA, USA / Book of abstracts,

[Uluslararası](#)

Biodistribution Pharmacokinetics and Toxicology Study of Highly Biocompatible and Biodegradable Ag2S Near-Infrared Quantum Dots in Mice

A. Savalan, A. Temizyürek, E. Malekifard, T. M. Okyay, H. Turan, H. S. Moğul, B. Yılmaz, E. Brahimi, M. Kaya

2nd International Conference on Nanomaterials, Nanofabrication and Nanocharacterization, Turkey/ Book of abstracts,

[Ulusal](#)

Blood brain barrier dynamics and antiepileptogenic effects of antiepileptic drug-induced nanoparticle in WAG/Rij rats as a genetic absence epilepsy model epilepsy (Oral Presentation)

Arzu Temizyürek, Canan Ugur Yilmaz, Serkan Emik, Nurcan Orhan, Muge Atis, Ugur Akcan, Nadir Arican, Bulent Ahishali, Mehmet Kaya

Turkish Physiological Sciences Association 45th National Physiology Congress, Kuşadası, Turkey/ Book of abstracts,

[Ulusal](#)

BİLDİRİLER

Blood-brain barrier dynamics of nanotechnological drug carriers in animal model of temporal lobe epilepsy

Canan Uğur Yılmaz, Nurcan Orhan, Arzu Temizyürek, Müge Atış, Uğur Akcan, Rouhollah Khodadust, Nadir Arıcan, Mutlu Küçük, Candan Gürses, Bülent Ahışalı, Serkan Emik, Mehmet Kaya
43rd National Physiology Congress, Turkey/ Book of abstracts,

Ulusal

PROJELER

Experimental Intervention on ischemic stroke outcome (Araştırmacı)

Diğer (Uluslararası), 20.05.2025 -

Uluslararası Devam Ediyor

The Effect of Single and Multiple Optogenetic Spreading Depolarization induced Microglial, Pericyte and Astrocyte Response to Blood-Brain Barrier Dynamics in Common Pathways of Epilepsy and Migraine (Yönetici)

Diğer (Uluslararası), 21.02.2025 -

Uluslararası Devam Ediyor

Design and Development of an Efficient Therapeutic Strategy using anti-ageing siRNAs cocktails-enriched embryonic stem cell derived exosomes for rejuvenating senescent skin cells: Possible Pushing Back the Boundaries of Skin Aging (Araştırmacı)

Tübitak 1001, 27.01.2025 -

Ulusal Devam Ediyor

Evaluation of the Antineoplastic Activity of Low Molecular Weight Heparin on the Growth and Metastasis of Oral Squamous Cell Carcinoma Cells in a Xenograft Mouse Model (Araştırmacı)

Tübitak 1001, 27.12.2024 -

Ulusal Devam Ediyor

Parkinson Hastalığının Tedavisinde Potansiyel İlaç Etken Maddesi Olan Koridin Alkaloidinin Biyoteknolojik Olarak Üretimi, Saflaştırılması, Sitotoksik ve Nörokoruyucu Aktivitesinin Belirlenmesi (Araştırmacı)

Tübitak 1001, 27.12.2024 -

Ulusal Devam Ediyor

Biodegradable, Near-Infrared emitting dendronized quantum dots for glucose mediated delivery of Combination Therapy to Brain Tumors (Araştırmacı)

Diğer (Ulusal), 27.01.2024 -

Ulusal Devam Ediyor

In Vivo Evaluation of Blood Brain Barrier Crossing of Water -Soluble Silicon Phthalocyanines on Malignant Glioma Cell Lines (ongoing project supported by BAP Istanbul University (Araştırmacı)

Diğer (Ulusal), 27.01.2024 -

Ulusal Tamamlandı

Investigation of the Effect of STING Agonist Encapsulated with Cationic Polymer Nanoparticles on T Cell Mediated Anti-Tumor Immune Response in Cancer Immunotherapy (Araştırmacı)

Tübitak 3501, 27.12.2023 -

Ulusal Devam Ediyor

The relationship between unpredictable stress and the blood-brain barrier (Yönetici)

BAP, 22.03.2023 -

Ulusal Devam Ediyor

In vivo Investigation of the Therapeutic Efficacy of an Exosome-Based Nanocarrier System Originating from Wharton Gel Stem Cells TUSEB B (Araştırmacı)

Diğer, 27.01.2023 -

Ulusal Devam Ediyor

Polymeric Nanoparticle Based Smart Drug System for the Treatment of Cancer Tissues (Araştırmacı)

Diğer (Ulusal), 27.01.2023 -

Ulusal Tamamlandı

PROJELER

In vitro and In Vivo Investigation of the Roles of BRPF Epigenetic Regulators in Reversing Taxane Resistance in Castration-Resistant Prostate Cancer (Araştırmacı)

Tübitak 3501, 27.01.2022 -

Ulusal **Tamamlandı**

The role of calpain inhibitor-I in NF- κ B pathway in an in vitro blood-brain barrier model under inflammatory conditions (Araştırmacı)

Diğer (Ulusal), 27.01.2021 -

Ulusal **Tamamlandı**

Effect of resolvin D1 on blood-brain barrier integrity in angiotensin II-induced chronic hypertensive model (Araştırmacı)

Diğer (Ulusal), 27.01.2021 -

Ulusal **Devam Ediyor**

Roles of transforming growth factor beta receptor I and dynamin on blood-brain barrier integrity in hypertensive mice (Araştırmacı)

Diğer (Ulusal), 27.01.2020 -

Ulusal **Tamamlandı**

Effect of resolvin D1 on blood-brain barrier integrity in angiotensin II-induced chronic hypertensive model (Araştırmacı)

Diğer (Ulusal), 27.01.2020 -

Ulusal **Tamamlandı**

The effect on FABP7 on BBB integrity in LPS-induced inflammation (Araştırmacı)

Diğer (Ulusal), 27.01.2020 -

Ulusal **Tamamlandı**

Development of tumor targeting theranostic nanoparticles for combination therapy and their in vitro and in vivo tests (Araştırmacı)

Tübitak 1001, 27.01.2019 -

Ulusal **Tamamlandı**

Biological Drug Design with Blood-Brain Barrier Carrier for Temporal Lobe Epilepsy Treatment (Araştırmacı)

Diğer (Uluslararası), 27.01.2019 -

Uluslararası **Tamamlandı**

Development of Mesenchymal Stem Cells, Nanoparticles and MicroRNA Mediated Combined Treatment Method in an Osteoarthritis Model (Araştırmacı)

Diğer (Ulusal), 27.01.2018 -

Ulusal **Tamamlandı**

The effects of the methyl-beta-cyclodextrin and myriocin on blood-brain barrier integrity in septic rats (Araştırmacı)

Diğer (Ulusal), 27.01.2018 -

Ulusal **Tamamlandı**

Blood brain barrier dynamics and antiepileptogenic effects of antiepileptic drug- bound nanoparticle in WAG/Rij rats as a genetic absence epilepsy mode (Araştırmacı)

BAP, 27.01.2018 -

Ulusal **Tamamlandı**

The investigation of the therapeutic and prophylaxis effect of fulvic acid in MCF-7 cell line induced breast cancer models (Araştırmacı)

Diğer (Ulusal), 27.12.2017 -

Ulusal **Tamamlandı**

Investigation of proteins that interact with FGF1 in the peripheral nervous system (Uzman)

BAP, 27.03.2017 -

Ulusal **Tamamlandı**

PROJELER

Treatment of the drug-bound nanoparticles in animal models of temporal lobe epilepsy and dynamics of the blood-brain barrier (Araştırmacı)

BAP, 27.01.2017 -

Ulusal **Tamamlandı**

TEZ DANIŞMANLIKLARI

DERSLER

Ders Türü	Ders Kodu	Ders Adı
Lisans	MED 100 - Committee	Molecular & Cellular Medical Sciences/ Physiology
Lisans	MED 200- Committee	Physiology of the Nervous System
Lisans	MED 200- Committee	Physiology of the Reproductive System
Lisans	MED 200- Committee	Physiology of the Urinary Tract System
Lisans	MED 100 - Committee	Physiology of the Musculoskeletal System
Lisans	MED 200- Committee	Physiology of the Digestive System
Yüksek lisans	BMSE	PHYSIOLOGY
Lisans	SRCP	Social Responsibility and Career Plan
Lisans	MED -II	Medical Skills

KİŞİSEL BİLGİLER

İLETİŞİM BİLGİLERİ

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