

## Prof. AYŞE KARSON

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: F-7106-2018

ScopusID: 6603502813

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### Education Information

Expertise In Medicine, Kocaeli University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, Turkey 1995 - 1999

Postgraduate, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty Of Medicine, Turkey 1985 - 1992

### Foreign Languages

English, C1 Advanced

### Research Areas

Neurophysiology

### Academic Titles / Tasks

Associate Professor, Kocaeli University, Tıp Fakültesi, Temel Tıp Bilimleri, 2013 - Continues

### Advising Theses

Karson A., Hipokretin Nöronlarının Absans Epilepsi İle İlişkinin Araştırılması, Doctorate, F.Dede(Student), Continues

Karson A., Genetik absans epilepsili sıçanların kortikal beyin bölgelerinde kalsiyum bağlayan proteinlerin incelenmesi, Doctorate, S.ARKAN(Student), 2017

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

1. Investigation of Demyelination and Remyelination Processes of the Compressed Optic Chiasm: An Experimental Model  
EMENGEN A., ANIK İ., KÖKTÜRK S., KARSON A., YILMAZ E., BASARAN E., CAKLILI M., ANIK Y., CEYLAN S., ÇABUK B.,

et al.

Turkish Neurosurgery, vol.33, no.5, pp.811-820, 2023 (SCI-Expanded)

- II. **Agmatine has beneficial effect on harmaline-induced essential tremor in rat**  
Akman Ö., Utkan T., Arıcıoğlu F., Güllü K., Ateş N., Karson A.  
NEUROSCIENCE LETTERS, vol.753, 2021 (SCI-Expanded)
- III. **Timing behavior in genetic murine models of neurological and psychiatric diseases**  
Karson A., Balcı F.  
Experimental Brain Research, vol.239, no.3, pp.699-717, 2021 (SCI-Expanded)
- IV. **Etanercept rescues cognitive deficits, depression-like symptoms, and spike-wave discharge incidence in WAG/Rij rat model of absence epilepsy.**  
Karson A., Utkan T., Demirtaş Şahin T., Balcı F., Arkan S., Ateş N.  
Epilepsy & behavior : E&B, vol.115, pp.107532, 2021 (SCI-Expanded)
- V. **Etanercept improves aging-induced cognitive deficits by reducing inflammation and vascular dysfunction in rats.**  
Gocmez S. S., Yazır Y., Gacar G., Demirtaş Şahin Ş., Arkan S., Karson A., Utkan T.  
Physiology & behavior, vol.224, pp.113019, 2020 (SCI-Expanded)
- VI. **Aging impairs perceptual decision-making in mice: integrating computational and neurobiological approaches**  
Gür E., Duyan Y., Türkakın E., Arkan S., Karson A., Balcı F.  
BRAIN STRUCTURE & FUNCTION, vol.225, no.6, pp.1889-1902, 2020 (SCI-Expanded)
- VII. **Interval timing deficits and their neurobiological correlates in aging mice**  
Gur E., Duyan Y. A., Arkan S., KARSON A., Balcı F.  
NEUROBIOLOGY OF AGING, vol.90, pp.33-42, 2020 (SCI-Expanded)
- VIII. **The lower expression of parvalbumin in the primary somatosensory cortex of WAG/Rij rats may facilitate the occurrence of absence seizures**  
Arkan S., Kasap M., Akman O., Akpınar G., Ateş N., Karson A.  
NEUROSCIENCE LETTERS, vol.709, 2019 (SCI-Expanded)
- IX. **INVESTIGATION OF THE EXPRESSION OF CALCIUM BINDING PROTEINS IN SOMATOSENSORIAL CORTEX OF WAG/RIJ RATS**  
ARKAN S., KASAP M., Akman O., ATEŞ N., KARSON A.  
EPILEPSIA, vol.57, pp.150, 2016 (SCI-Expanded)
- X. **Proteome profile of extratemporal structures in amygdala kindling mesial temporal lobe epilepsy rat model: A preliminary study**  
Yılmaz A. D., Çiftçi G. G., Demiralp D. Ö., İğci N., Akman Ö., ATEŞ N., KARSON A.  
Current Proteomics, vol.13, no.4, pp.271-284, 2016 (SCI-Expanded)
- XI. **Erratum Age dependent decline in learning and memory performances of WAG Rij rat model of absence epilepsy**  
Karson A., Utkan T., Balcı F., Arıcıoğlu F., Ateş N.  
Behavioral And Brain Functions, vol.11, 2015 (SCI-Expanded)
- XII. **TNF-alpha inhibition prevents cognitive decline and maintains hippocampal BDNF levels in the unpredictable chronic mild stress rat model of depression**  
Demirtaş Şahin T., Karson A., Balcı F., Yazır Y., Bayramgürler D., Utkan T.  
BEHAVIOURAL BRAIN RESEARCH, vol.292, pp.233-240, 2015 (SCI-Expanded)
- XIII. **Etanercept Improves Cognitive Performance and Increases eNOS and BDNF Expression During Experimental Vascular Dementia in Streptozotocin-induced Diabetes**  
Utkan T., Yazır Y., Karson A., Bayramgürler D.  
CURRENT NEUROVASCULAR RESEARCH, vol.12, pp.135-146, 2015 (SCI-Expanded)
- XIV. **The Link Between Unpredictable Chronic Mild Stress Model for Depression and Vascular Inflammation?**  
Demirtaş Şahin T., Utkan T., Karson A., Yazır Y., Bayramgürler D., Gacar N.  
INFLAMMATION, vol.37, pp.1432-1438, 2014 (SCI-Expanded)

- XV. **Comparative Proteomic Approach in Rat Model of Absence Epilepsy**  
Gürol G., Demiralp D. Ö., Yılmaz A. K., Akman Ö., ATEŞ N., KARSON A.  
Journal of Molecular Neuroscience, vol.55, no.3, pp.632-643, 2014 (SCI-Expanded)
- XVI. **Effects of long-term etanercept treatment on anxiety- and depression-like neurobehaviors in rats**  
Bayramgürler D., Karson A., Özer C., Utkan T.  
PHYSIOLOGY & BEHAVIOR, vol.119, pp.145-148, 2013 (SCI-Expanded)
- XVII. **The Effects of Vagal Nerve Stimulation in Focal Cerebral Ischemia and Reperfusion Model**  
Ekici F., KARSON A., Dillioglugil M. Ö., Gurol G., Kir H., Ates N.  
TURKISH NEUROSURGERY, vol.23, no.4, pp.451-457, 2013 (SCI-Expanded)
- XVIII. **The effect of etanercept on aortic nitric oxide-dependent vasorelaxation in an unpredictable chronic, mild stress model of depression in rats**  
Bayramgürler D., Karson A., Yazır Y., Celikyurt I. K., Kurnaz S., Utkan T.  
EUROPEAN JOURNAL OF PHARMACOLOGY, vol.710, no.1-3, pp.67-72, 2013 (SCI-Expanded)
- XIX. **Chronic Administration of Infliximab (TNF-alpha Inhibitor) Decreases Depression and Anxiety-like Behaviour in Rat Model of Chronic Mild Stress**  
Karson A., Demirtaş Şahin T., Bayramgürler D., Balci F., Utkan T.  
BASIC & CLINICAL PHARMACOLOGY & TOXICOLOGY, vol.112, pp.335-340, 2013 (SCI-Expanded)
- XX. **Age-dependent decline in learning and memory performances of WAG/Rij rat model of absence epilepsy.**  
Karson A., Utkan T., Balci F., Arıcıoğlu F., Ateş N.  
Behavioral and brain functions : BBF, vol.8, pp.51, 2012 (SCI-Expanded)
- XXI. **The effect of memantine in harmaline-induced tremor and neurodegeneration**  
İşeri P., Karson A., Gullu K. M., Akman O., Köktürk S., Yardımoğlu M., Ertürk S., Ateş N.  
NEUROPHARMACOLOGY, vol.61, pp.715-723, 2011 (SCI-Expanded)
- XXII. **Perirhinal cortical kindling in rats with genetic absence epilepsy**  
Akman O., KARSON A., Aker R. G., ATEŞ N., Onat F. Y.  
Neuroscience Letters, vol.479, no.1, pp.74-78, 2010 (SCI-Expanded)
- XXIII. **Hippocampal kindling in rats with absence epilepsy resembles amygdaloid kindling**  
Akman O., KARSON A., Aker R. G., ATEŞ N., Onat F. Y.  
Epilepsy Research, vol.81, pp.211-219, 2008 (SCI-Expanded)
- XXIV. **The effects of the immature rat model of febrile seizures on the occurrence of later generalized tonic-clonic and absence epilepsy**  
Ateş N., Akman Ö., Karson A.  
Developmental Brain Research, vol.154, pp.137-140, 2005 (SCI-Expanded)
- XXV. **Effects of adenosine administration on spike-wave discharge frequency in genetically epileptic rats.**  
İlbay G., Sahin D., Karson A., Ates N.  
Clinical and experimental pharmacology & physiology, vol.28, no.8, pp.643-6, 2001 (SCI-Expanded)
- XXVI. **Cardiovascular effects of intracerebroventricular bicuculline in rats with absence seizures.**  
Karson A., Aker R., ATEŞ N., ONAT F.  
Epilepsy research, vol.34, pp.231-9, 1999 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Cellular, Behavioral, and Locomotor Effects of Oral Nicotine in Male Rats with Bilateral Lesions in the Ventrolateral Striatum Induced with 6-OHDA**  
Sarica Darol E., Karson A., Köktürk S., İşeri P.  
CLINICAL AND EXPERIMENTAL HEALTH SCIENCES, vol.13, no.3, pp.615-622, 2023 (ESCI)
- II. **THE EFFECT of AGMATINE on SPIKE-AND-WAVE DISCHARGES in A GENETIC MODEL of ABSENCE EPILEPSY**  
AGMATİNİN GENETİK BİR ABSANS EPİLEPSİ MODELİNDE DİKEN-VE-DALGA DEŞARJLAR ÜZERİNE ETKİSİ

Akman Ö., UTKAN T., ARICIOĞLU F., ATEŞ N., KARSON A.

Istanbul Tıp Fakültesi Dergisi, vol.85, no.1, pp.15-21, 2022 (ESCI)

III. **Cardiovascular changes in WAG/Rij rats with genetic absence epilepsy: Effects of chronic ethosuximide treatment**

Demirtaş Şahin T., Utkan T., Karson A., Yazır Y., Karaoz E.

CUKUROVA MEDICAL JOURNAL, vol.45, pp.769-777, 2020 (ESCI)

IV. **Locomotor Activity, Learning and Memory in WAG/Rij Rats with Absence Epilepsy**

KARSON A., Onat F., Balci F., ATEŞ N.

EPILEPSI, vol.14, no.3, pp.167-175, 2008 (ESCI)

V. **Sensitivity to Febrile Seizures in Genetically Absence Epileptic WAG/Rij Rat Pups**

Akman O., KARSON A., ATEŞ N.

EPILEPSI, vol.11, no.1, pp.11-15, 2005 (ESCI)

VI. **Adenozinin Geçici Orta Serebral Arter İskemisindeki Nöroprotektif Etkisi**

Ekici F., Karson A., Ateş N.

Kocatepe Tıp Dergisi , vol.5, pp.39-42, 2004 (Peer-Reviewed Journal)

VII. **TEK VE TEKRARLANAN PENTİLENTETRAZOL DOZLARIYLA OLUŞTURULAN KONVULSİYONLARDA EPİLEPTİK AKTİVİTE VE KAN-BEYİN ENGELİ PERMEABİLİTE DEĞİŞİKLİKLERİNİN ARAŞTIRILMASI**

İlbay G., Ateş N., Şahin D., Esen N., Karson A.

Epilepsi, vol.3, pp.11-15, 1997 (ESCI)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Enhancement of cognitive performance by chronic ethosuximide and neural stem cell treatment in genetic absence epileptic WAG/Rij rats**  
Utkan T., Şahin T., Karson A., Göçmez S. S.  
29th Congress of the European-College-of-Neuropsychopharmacology (ECNP), Vienna, Austria, 17 - 20 September 2016, vol.26
- II. **Effect of Neural Stem Cell Transplantation on Absence Seizures in Genetic Absence Epileptic WAG/Rij Rats**  
Utkan T., Demirtaş Şahin T., Karson A., Yazır Y.  
30th Seoul World Congress of the International-College-of-Neuropsychopharmacology (CINP), Seoul, South Korea, 3 - 07 July 2016, vol.19, pp.269
- III. **Effects of etanercept on vascular dementia in aged rats**  
Aksöz E., Utkan T., Yazır Y., Demirtaş Şahin T., Karson A.  
28th Congress of the European-College-of-Neuropsychopharmacology (ECNP), Amsterdam, Netherlands, 29 August - 01 September 2015, vol.25
- IV. **Penile constitutive nitric oxide synthase expression in depressed rats exposed to unpredictable chronic mild stress: role of inflammation**  
Demirtaş Şahin T., Yazır Y., Utkan T., Karson A., Bayramgürler D.  
28th Congress of the European-College-of-Neuropsychopharmacology (ECNP), Amsterdam, Netherlands, 29 August - 01 September 2015, vol.25
- V. **Effect of chronic etanercept (a TNF- $\alpha$  inhibitor) treatment on depressive-like behaviour in aged rats**  
DEMİRTAŞ ŞAHİN T., ARKAN S., KARSON A., UTKAN T.  
28th ECNP Congress, 29 August - 01 September 2015
- VI. **Etanercept Treatment Prevents Emotional Memory Deficits of Cafeteria Diet-Fed Rats**  
Demirtaş Şahin T., Utkan T., Aksöz E., Karson A.  
70th Annual Scientific Meeting of the Society-of-Biological-Psychiatry on Stress, Emotion, Neurodevelopment and Psychopathology, Toronto, Canada, 14 - 16 May 2015, vol.77
- VII. **The Relationship Between Ageing-Induced Dementia and Inflammation**  
UTKAN T., YAZIR Y., DEMİRTAŞ ŞAHİN T.

70th Annual Scientific Meeting of the Society-of-Biological-Psychiatry on Stress, Emotion, Neurodevelopment and Psychopathology, Toronto, Canada, 14 - 16 May 2015, vol.77

VIII. **Effect of Etanercept, a TNF-alpha Inhibitor, on Depressive-Like Behavior in Cafeteria Diet-Fed Rats**  
Demirtaş Şahin T., Utkan T., Aksöz E.

70th Annual Scientific Meeting of the Society-of-Biological-Psychiatry on Stress, Emotion, Neurodevelopment and Psychopathology, Toronto, Canada, 14 - 16 May 2015, vol.77

## Supported Projects

KARSON A., KORKMAZ O. T., DEDE F., Project Supported by Higher Education Institutions, HİPOKRETİN NÖRONLARININ ABSANS EPİLEPSİ İLE İLİŞKİSİNİN ARAŞTIRILMASI, 2019 - Continues

KARSON A., Project Supported by Higher Education Institutions, SIÇANLARDA HARMALINLE İNDÜKLENEN ESANSİYEL TREMOR MODELİNDE HCN KANAL BLOKAJININ TREMOR VE NÖRONAL AKTİVİTE PATERNİ ÜZERİNE ETKİSİ, 2018 - 2019

Utkan T., Demirtaş Şahin T., Karson A., Yazır Y., Project Supported by Higher Education Institutions, Genetik absans epileptik WAG Rij sıçanlarda behevryoral ve kognitif fonksiyonlar üzerinde TNF alfa inhibitörlerinin etkilerinin araştırılması, 2015 - 2018

Balcı F., Karson A., TÜBİTAK - AB COST Project, Bilişsel Yaşlanma Fare Modeli Olarak Karar Verme ve Aralık Zamanlama Davranışsal Nörobiyolojik ve Hesaplamalı Yaklaşımlar, 2015 - 2018

KARSON A., Project Supported by Higher Education Institutions, Absans Epilepsili Sıçanların Kortikal GABAerjik Nöronlarında Kalsiyum Bağlayan Proteinleri ve Nöropeptidlerin İncelenmesi, 2015 - 2017

KARSON A., Project Supported by Higher Education Institutions, Yetişkin sıçanlarda Kronik Alkol UygulamasınınP-Gp İfadesi Üzerine Etkilerinin ve Dağılım Özelliklerinin İncelenmesi, 2014 - 2017

Balcı F., Karson A., TUBİTAK Project, Zamansal ve Sayısal Risk Analizi, 2012 - 2015

Karson A., Özel Demiralp F. D., Ateş N., TUBİTAK Project, Genetik Absans Epilepsili WAG/Rij Sıçanlarda Epileptogenez Sürecinin, Absans ve Limbik Epilepsi Örneklerinde, Bölgesel ve Moleküler Düzeyde Proteomiks Yöntemi ile Araştırması, 2009 - 2011

Karson A., Onat F., Gülhan R., Ateş N., TUBİTAK Project, WAG Rij Irkı Sıçanlarda Kindling Nöbet Duyarlılığında Korteksin Rolü, 2006 - 2007

## Metrics

Publication: 70

Citation (WoS): 384

Citation (Scopus): 522

H-Index (WoS): 11

H-Index (Scopus): 12

## Non Academic Experience

Sağlık Bakanlığı, Kdz. Ereğli Kdz. Ereğli Devlet Hastanesi

Sağlık Bakanlığı, Kdz. Ereğli Verem Savaş Dispanseri

Sağlık Bakanlığı, Çaycuma Sağlık Ocağı