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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAD-4949-2020

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Education Information

Post Doctorate, University of Wales, Cardiff, Cardiff University School Of Biosciences, Neuroscience, United Kingdom
2012 - 2013

Doctorate, Istanbul University, Faculty Of Pharmacy , Farmakoloji, Turkey 2006 - 2010

Postgraduate, Istanbul University, Faculty Of Pharmacy , Farmakoloji, Turkey 2004 - 2006

Undergraduate, Istanbul University, Faculty Of Pharmacy , Turkey 2000 - 2004

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Genetik Absans Epilepsili Sıçanlarda Kindling Sürecinde Talamokortikal Döngünün Araştırılması., Istanbul University, Faculty of Pharmacy , Farmakoloji, 2010

Postgraduate, 20, 30 VE 60 GÜNLÜK GAERS VE WİSTAR KONTROL SIÇANLARDA KINDLING SÜRECİNİN İNCELENMESİ, Istanbul University, Faculty of Pharmacy , Farmakoloji, 2006

Research Areas

Health Sciences, Pharmacology and Therapeutics, Professional Sciences

Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty of Pharmacy , Department of Professional Pharmaceutical Sciences,
2019 - Continues

Assistant Professor, Istanbul University, Faculty of Pharmacy , Meslek Bilimleri, 2015 - 2018

Research Assistant PhD, Istanbul University, Faculty of Pharmacy , Meslek Bilimleri, 2010 - 2015

Research Assistant, Istanbul University, Faculty of Pharmacy , Meslek Bilimleri, 2005 - 2010

ÇARÇAK YILMAZ N., Strasbourg kökenli genetik absans epilepsili sıçanlarda (GAERS) sodyum kanal blokörü lakozamidin spontan absans nöbetlerin gelişimi üzerine olan etkisinin incelenmesi, Postgraduate, C.Karanfil(Student), Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Antibody induced seizure susceptibility and impaired cognitive performance in a passive transfer rat model of autoimmune encephalitis**
Pişkin Ş. A., Korkmaz H., Ulusoy C. A., Şanlı E., Küçükali C. İ., Onat F., Tüzün E., Çarçak N.
FRONTIERS IN IMMUNOLOGY, vol.14, 2023 (SCI-Expanded)
- II. **Astrocytes as a target for therapeutic strategies in epilepsy: current insights**
Çarçak N., ONAT F., Sitnikova E.
FRONTIERS IN MOLECULAR NEUROSCIENCE, vol.16, 2023 (SCI-Expanded)
- III. **Involvement of orexin type-2 receptors in genetic absence epilepsy rats**
Toplu A., Mutlu N., Erdeve E. T., SARIYILDIZ Ö., Çelik M., ÖZ ARSLAN D., Akman Ö., Molnár Z., Çarçak N., ONAT F.
FRONTIERS IN NEUROLOGY, vol.14, 2023 (SCI-Expanded)
- IV. **The effect of chronic treatment with sodium channel blocker lacosamide on early development of absence seizures in genetic absence epilepsy rats**
Carcak N., Karanfil C., Akat S., Akman O., ONAT F.
EPILEPSY RESEARCH, vol.182, 2022 (SCI-Expanded)
- V. **Decreased Hyperpolarization-Activated Cyclic Nucleotide-Gated Channel 2 Activity in a Rat Model of Absence Epilepsy and the Effect of ZD7288, an Ih Inhibitor, on the Spike-and-Wave Discharges**
YAVUZ M., AYDIN OMA Y B., Carcak N., ONAT F.
PHARMACOLOGY, vol.107, pp.227-234, 2022 (SCI-Expanded)
- VI. **Atipamezole, a specific alpha(2A) antagonist, suppresses spike-and-wave discharges and alters Ca2+/calmodulin-dependent protein kinase II in the thalamus of genetic absence epilepsy rats**
YAVUZ M., AYDIN OMA Y B., Carcak N., Akman O., Raci Yananli H., Onat F.
EPILEPSIA, vol.61, no.12, pp.2825-2835, 2020 (SCI-Expanded)
- VII. **Ca(v)3.2 T-type calcium channel mutation influences kindling-induced thalamic neuronal firing patterns in Genetic Absence Epilepsy Rats From Strasbourg**
Carcak N., Ali I., Powell K., Zheng T., ONAT F., O'Brien T. J.
EPILEPSIA, vol.60, no.7, pp.1378-1386, 2019 (SCI-Expanded)
- VIII. **Suppressive effect of Rho-kinase inhibitors Y-27632 and fasudil on spike-and-wave discharges in genetic absence epilepsy rats from Strasbourg (GAERS).**
Çarçak N., Yavuz M., Eryiğit K., Kurt A., Urhan K., Onat F., Büyükaşar K.
Naunyn-Schmiedeberg's archives of pharmacology, vol.391, pp.1275-1283, 2018 (SCI-Expanded)
- IX. **Suppression of Hyperpolarization-Activated Cyclic Nucleotide-Gated Channel Function in Thalamocortical Neurons Prevents Genetically Determined and Pharmacologically Induced Absence Seizures**
DAVID F., Carcak N., Furdan S., ONAT F., GOULD T., Meszaros A., Di Giovanni G., Hernandez V. M., Chan C. S., Lorincz M. L., et al.
JOURNAL OF NEUROSCIENCE, vol.38, no.30, pp.6615-6627, 2018 (SCI-Expanded)
- X. **Seizures and Antiepileptic Drugs: From Pathophysiology to Clinical Practice**
Carcak N., Ozkara C.
CURRENT PHARMACEUTICAL DESIGN, vol.23, no.42, pp.6376-6388, 2017 (SCI-Expanded)
- XI. **Increased inhibitory synaptic activity in the hippocampus (CA1) of genetic absence epilepsy rats: Relevance of kindling resistance**
Carcak N., Dilekoz E., GÜLHAN R., Onur R., Onat F. Y., Sara Y.
EPILEPSY RESEARCH, vol.126, pp.70-77, 2016 (SCI-Expanded)
- XII. **The role of the substantia nigra pars reticulata in kindling resistance in rats with genetic absence epilepsy**

- Akman O., Gulcebi M. I., Carcak N., Ozatman S. K., Eryigit T., Moshe S. L., Galanopoulou A. S., Onat F. Y.
EPILEPSIA, vol.56, no.11, pp.1793-1802, 2015 (SCI-Expanded)
- XIII. **Seizure expression, behavior, and brain morphology differences in colonies of Genetic Absence Epilepsy Rats from Strasbourg**
POWELL K. L., TANG H., NG C., GUILLEMAIN I., DIEUSET G., DEZSI G., Carcak N., ONAT F., MARTIN B., O'BRIEN T. J., et al.
EPILEPSIA, vol.55, no.12, pp.1959-1968, 2014 (SCI-Expanded)
- XIV. **Investigating local and long-range neuronal network dynamics by simultaneous optogenetics, reverse microdialysis and silicon probe recordings in vivo**
TAYLOR H., SCHMIEDT J. T., Carcak N., ONAT F., DI GIOVANNI G., LAMBERT R. C., LERESCHE N., CRUNELLI V., DAVID F.
JOURNAL OF NEUROSCIENCE METHODS, vol.235, pp.83-91, 2014 (SCI-Expanded)
- XV. **The effect of amygdala kindling on neuronal firing patterns in the lateral thalamus in the GAERS model of absence epilepsy**
Carcak N., ZHENG T., ALI I., ABDULLAH A., FRENCH C., POWELL K. L., JONES N. C., VAN RAAY L., RIND G., ONAT F., et al.
EPILEPSIA, vol.55, no.5, pp.654-665, 2014 (SCI-Expanded)
- XVI. **IL-1 beta is induced in reactive astrocytes in the somatosensory cortex of rats with genetic absence epilepsy at the onset of spike-and-wave discharges, and contributes to their occurrence**
Akin D., RAVIZZA T., MAROSO M., Carcak N., Eryigit T., VANZULLI I., Aker R. G., VEZZANI A., Onat F. Y.
NEUROBIOLOGY OF DISEASE, vol.44, no.3, pp.259-269, 2011 (SCI-Expanded)
- XVII. **Localized cortical injections of ethosuximide suppress spike-and-wave activity and reduce the resistance to kindling in genetic absence epilepsy rats (GAERS)**
Aker R. G., Tezcan K., Carcak N., Sakalli E., Akin D., Onat F. Y.
EPILEPSY RESEARCH, vol.89, no.1, pp.7-16, 2010 (SCI-Expanded)
- XVIII. **Effect of stage 2 kindling on local cerebral blood flow rates in rats with genetic absence epilepsy**
Carcak N., Ferrandon A., KONING E., Aker R. G., Oezdemir O., Onat F. Y., NEHLIG A.
EPILEPSIA, vol.50, no.1, pp.33-43, 2009 (SCI-Expanded)
- XIX. **The relationship between age-related development of spike-and-wave discharges and the resistance to amygdaloid kindling in rats with genetic absence epilepsy**
Carcak N., Aker R. G., Oezdemir O., Demiralp T., Onat F. Y.
NEUROBIOLOGY OF DISEASE, vol.32, no.3, pp.355-363, 2008 (SCI-Expanded)

Articles Published in Other Journals

- I. **Clopidogrel Resistance in Stroke Cases**
Carcak N., Ozmen B. T., Dartici Z. S., Emre U., Kilickesmez O.
ISTANBUL MEDICAL JOURNAL, vol.20, no.6, pp.563-567, 2019 (ESCI)
- II. **Pharmacologically induced absence seizures & kindling in Wistar rats.**
Carcak N., Sahiner M., Akman O., Idrizoglu M., Cortez M., Snead O., Eskazan E., Onat F.
Northern clinics of Istanbul, vol.7, pp.25-34, 2019 (Peer-Reviewed Journal)
- III. **The Role of Rho/Rho-Kinase Pathway in the Pathophysiology of Absence Epilepsy**
Carcak N., Yavuz M., Eryigit T., KURT A. H., Urhan Kucuk M., ONAT F., BÜYÜKAŞAR K.
EPILEPSI, vol.25, no.1, pp.1-7, 2019 (ESCI)
- IV. **Managing epilepsy by modulating glia**
GULCEBI M. I., ÇARÇAK YILMAZ N., Onat F. Y.
Anatomy, vol.10, no.1, pp.50-59, 2016 (Peer-Reviewed Journal)
- V. **Evaluation of GAD67 immunoreactivity in the region of substantia nigra pars reticulata in resistance to development of convulsive seizure in genetic absence epilepsy rats**
Gulcebi M., Akman O., Carcak N., Karamahmutoglu T., ONAT F.

NORTHERN CLINICS OF ISTANBUL, vol.3, no.3, pp.161-167, 2016 (ESCI)

- VI. **The Gamma-Butyrolactone Model of Absence Epilepsy: Acute and Chronic Effects in Wistar Rats**
ERYIGIT T., ÇARÇAK YILMAZ N., Şahiner M., Akman Ö., Snead C., Eşkazan E., Onat F. Y.
EPILEPSI, vol.19, no.2, pp.48-52, 2013 (Peer-Reviewed Journal)
- VII. **Gebelik ve emzirme döneminde ilaç kullanımı.**
UYDEŞ DOĞAN B. S., ÇARÇAK N.
Meslek İçi Sürekli Eğitim Dergisi, vol.13, no.14, pp.47-59, 2005 (Non Peer-Reviewed Journal)

Books & Book Chapters

- I. **Epileptogenez Çalışmaları ve Anti-epileptogenik İlaç Araştırmaları**
ONAT F., ÇARÇAK YILMAZ N.
in: Epilepsi ve Farmakoterapisi Klinik ve Nörobiyolojik Yaklaşım, Aysin Dervent, Filiz Onat, Ebru Atındağ, Editor, Nobel Tıp Kitapevleri, İstanbul, pp.325-343, 2022
- II. **Epilepsinin Nörobiyolojisi ve Farmakoterapisinde Etkili Mekanizmalar**
ÇARÇAK YILMAZ N.
in: Epilepsi ve Farmakoterapisi Klinik ve Nörobiyolojik Yaklaşım, Filiz Onat, Aysin Dervent, Ebru Altındağ, Editor, Nobel Tıp Kitapevleri, İstanbul, pp.295-307, 2022
- III. **Farmakoloji**
ÇARÇAK YILMAZ N.
in: Türk Farmakopesi, Ali Alkan, Eray Kaplan, Oğuzhan Koyuncu, Selin Ergün Ayan, Editor, Artı 6 Reklam Matbaa, Ankara, pp.100-120, 2018
- IV. **Epilepsinin Deneysel Modelleri**
Yılmaz Onat F., ÇARÇAK YILMAZ N.
in: Epilepsi: Genişletilmiş İkinci Baskı, Bora iH., Yeni N., Gürses C, Editor, Güneş Tıp Kitapevi Yayınları, İstanbul, pp.600-617, 2018

Supported Projects

Çarçak Yılmaz N., TUBITAK Project, Absans Epilepsisinden Sorumlu Moleküler Mekanizmalarının Genetik Sıçan Modelinde Spasyotemporal RNA Dizileme ile İncelenmesi, 2022 - 2024

Çarçak Yılmaz N., Horizon Europe Project, Genetically engineering Experimental Models: Enhancement of Scientific and Technological Excellence and innovation potential to study Neurodevelopmental aspects of brain disorders(GEMSTONE), 2022 - 2024

TÜZÜN E., KÜÇÜKALİ C. İ., AKAT Ş., ÇARÇAK YILMAZ N., KARMAHMUTOĞLU T., ERDAĞ E., ONAT F., ULUSOY C. A., KARAASLAN Z., ÇIRAK S., et al., Project Supported by Higher Education Institutions, OTOİMMÜN ENSEFALİT ANTİKOR UYGULAMASI EPİLEPSİ NÖBETİNE YOL AÇAR MI HAYVAN MODELLERİ İLE ARAŞTIRILMASI, 2019 - 2023

ÇARÇAK YILMAZ N., KARANFİL C., Project Supported by Higher Education Institutions, Strasbourg kökenli genetik absans epilepsili sıçanlarda GAERS sodyum kanal blokeri Lakozamidin spontan absans nöbetlerin gelişimi üzerine olan etkisinin incelenmesi, 2018 - 2022

ÇARÇAK YILMAZ N., DAVID F., ONAT F., CRUNELLİ V., Project Supported by Higher Education Institutions, Deneysel absans nöbetlerin başlama alanını keşfetmek: hastaya özgü tedavi için yeni yollar (Exploring the initiation site of experimental absence seizures: novel pathways for patient tailored treatment), 2017 - 2018

ÇARÇAK YILMAZ N., Project Supported by Higher Education Institutions, Amigdala Kindling in GAERS suşu sıçanlarda lateral thalamus üzerine etkisi, 2015 - 2017

ÇARÇAK YILMAZ N., TUBITAK Project, Absans epilepsisinin Patofizyolojisinde Rho/Rho-kinaz yolağının olası rolü, 2014 - 2016

ÇARÇAK YILMAZ N., Project Supported by Higher Education Institutions, Absans Epilepsisinin Fare Modelinde Kortikal Başlangıç Noktasının Karakterizasyonu, 2014 - 2015

ÇARÇAK YILMAZ N., Project Supported by Higher Education Institutions, Genetik Absans Epilepsili Sıçan Modelinde Amigdala Kindling'in Tek Hücre Ateşleme Özellikleri Üzerine Etkisinin İncelenmesi, 2011 - 2011

ÇARÇAK YILMAZ N., Project Supported by Higher Education Institutions, Genetik Absans Epilepsili Sıçanlarda Kindling Direncinin Nöronal Düzeyde Aydınlatılması, 2011 - 2011

Memberships / Tasks in Scientific Organizations

Beyin Araştırmaları Derneği, Member, 2006 - Continues

Türk Farmakoloji Derneği, Member, 2006 - Continues

Türk Epilepsi ile Savaş Derneği, Member, 2005 - Continues

Scientific Refereeing

Neurological Sciences and Neurophysiology, SCI Journal, January 2019

Necmettin Erbakan Üniversitesi Sağlık Bilimleri Fakültesi Dergisi , National Scientific Refreed Journal, January 2019

Epilepsy Research, SCI Journal, September 2018

Nöropsikiyatri Arşivi, National Scientific Refreed Journal, April 2014

Neurological sciences, SCI Journal, February 2014

Metrics

Publication: 66

Citation (WoS): 277

Citation (Scopus): 284

H-Index (WoS): 9

H-Index (Scopus): 10

Scholarships

2219-Doktora Sonrası Araştırma Bursu, TUBITAK, 2012 - 2013

2214-Yurtdışı Araştırma Bursu, TUBITAK, 2008 - 2009

Okul Birinciliği Bursu, University, 2003 - 2004

Awards

ÇARÇAK YILMAZ N., Esat Eşkazan Temel Bilimler makale ödülü, Epilepsi ile savaş derneği, May 2016

ÇARÇAK YILMAZ N., CACINA C., Poster birincilik ödülü, 10. Epilepsi Kongresi, May 2016

ÇARÇAK YILMAZ N., Beyin Araştırmaları Derneği Novartis Yayın Teşvik Ödülü, Novartis/Beyin Araştırmaları Derneği, April 2009

Non Academic Experience

Other Public Institution, İstanbul Eğitim Ve Araştırma Hastanesi

Cardif Üniversitesi Biyolojik bilimler Fakültesi

Cardiff Üniversitesi Biyolojik Bilimler Fakültesi

Cardiff Üniversitesi Biyolojik Bilimler Fakültesi

Cardiff Üniversitesi Biyolojik Bilimler Fakültesi
Melbourne Üniversitesi Tıp fakültesi
Strasbourg Üniversitesi INSERM Unite 1129