

## Asst. Prof. Nihan ÇARÇAK YILMAZ

### Personal Information

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### Education Information

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

Doctorate, İstanbul Üniversitesi, Faculty of Pharmacy , Farmakoloji, Turkey 2006 - 2010

Postgraduate, İstanbul Üniversitesi, Faculty of Pharmacy , Farmakoloji, Turkey 2004 - 2006

Undergraduate, İstanbul Üniversitesi, Faculty of Pharmacy , Turkey 2000 - 2004

### Foreign Languages

English, C1 Advanced

### Dissertations

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

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

### Research Areas

Health Sciences, Pharmacology and Therapeutics, Professional Sciences

### Academic Titles / Tasks

Associate Professor, İstanbul University, Faculty Of Pharmacy , Department Of Professional Pharmaceutical Sciences,  
2019 - Continues

Assistant Professor, İstanbul University, Faculty of Pharmacy , Meslek Bilimleri, 2018 - Continues

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

Research Assistant PhD, İstanbul Üniversitesi, Faculty of Pharmacy , Meslek Bilimleri, 2010 - 2015

Research Assistant, İstanbul Üniversitesi, Faculty of Pharmacy , Meslek Bilimleri, 2005 - 2010

### Advising Theses

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

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Atipamezole, a specific alpha(2A) antagonist, suppresses spike-and-wave discharges and alters Ca<sup>2+</sup>/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, 2020 (Journal Indexed in SCI)
- II. **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 (Journal Indexed in SCI)
- III. **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., Büyükafsar K.  
Naunyn-Schmiedeberg's archives of pharmacology, vol.391, pp.1275-1283, 2018 (Journal Indexed in SCI)
- IV. **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, pp.6615-6627, 2018 (Journal Indexed in SCI)
- V. **Seizures and Antiepileptic Drugs: From Pathophysiology to Clinical Practice**  
Carcak N., Ozkara C.  
CURRENT PHARMACEUTICAL DESIGN, vol.23, no.42, pp.6376-6388, 2017 (Journal Indexed in SCI)
- VI. **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 (Journal Indexed in SCI)
- VII. **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, pp.1793-1802, 2015 (Journal Indexed in SCI)
- VIII. **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 (Journal Indexed in SCI)
- IX. **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 (Journal Indexed in SCI)
- X. **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 (Journal Indexed in SCI)
- XI. **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 (Journal Indexed in SCI)
- XII. **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 (Journal Indexed in SCI)

### **XIII. 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 (Journal Indexed in SCI)

### **XIV. 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 (Journal Indexed in SCI)

## **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, pp.563-567, 2019 (Journal Indexed in ESCI)
- II. **Pharmacologically induced absence seizures & versus & 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 (Journal Indexed in ESCI)
- 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., BÜYÜKAFŞAR K.  
EPILEPSI, vol.25, no.1, pp.1-7, 2019 (Journal Indexed in ESCI)
- IV. **Managing epilepsy by modulating glia**  
GULCEBI M. I. , ÇARÇAK YILMAZ N., Onat F. Y.  
Anatomy, vol.10, pp.50-59, 2016 (Other Refereed National Journals)
- 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 (Journal Indexed in 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 (Other Refereed National Journals)
- 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 (National Non-Refereed Journal)

## **Books & Book Chapters**

- I. **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
- II. **Epilepsinin Deneysel Modelleri**  
Yılmaz Onat F., ÇARÇAK YILMAZ N.  
in: Epilepsi: Genişletilmiş İkinci Baskı, Bora iH., Yeni N., Gürses C, Editor, Güneş Tıp Kitabevi Yayınları, İstanbul, pp.600-617, 2018

## **Supported Projects**

TÜZÜN E., KÜÇÜKALİ C. İ. , AKAT Ş., ÇARÇAK YILMAZ N., KARAMAHMUTOĞLU 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 - Continues  
ÇARÇAK YILMAZ N., KARANFİL C., Project Supported by Higher Education Institutions, Strasbourg kökenli genetik absans epilepsili sıçanlarda GAERS sodyum kanal blokleri Lakozamidin spontan absans nöbetlerin gelişimi üzerine olan etkisinin incelenmesi, 2018 - Continues  
ÇARÇAK YILMAZ N., TUBITAK Project, Absans epilepsisinin Patofizyolojisinde Rho/Rho-kinaz yolağının olası rolü, 2014 - 2016

## 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

Necmettin Erbakan Üniversitesi Sağlık Bilimleri Fakültesi Dergisi , National Scientific Refreed Journal, January 2019  
Neurological Sciences and Neurophysiology, SCI Journal, January 2019  
Epilepsy Research, SCI Journal, September 2018  
Nöropsikiyatri Arşivi, National Scientific Refreed Journal, April 2014  
Neurological sciences, SCI Journal, February 2014

## Citations

Total Citations (WOS):187  
h-index (WOS):8

## 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  
CACINA C., ÇARÇAK YILMAZ N., 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