

## Prof. ORHAN TANSEL KORKMAZ

### Personal Information

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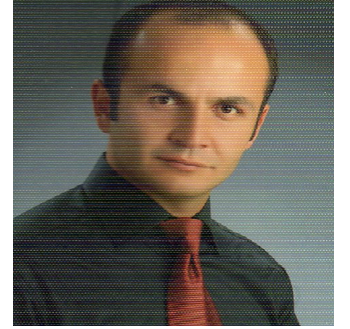
**Web:** <https://avesis.ogu.edu.tr/otkorkmaz>

### International Researcher IDs

ORCID: 0000-0003-1410-740X

ScopusID: 21743365400

Yoksis Researcher ID: 104937



### Education Information

Doctorate, Eskisehir Osmangazi University, SAĞLIK BİLİMLERİ ENSTİTÜSÜ, Fizyoloji (Dr),  
Turkey 2004 - 2009

### Research Areas

Neurophysiology

### Academic Titles / Tasks

Associate Professor, Eskisehir Osmangazi University, TIP FAKÜLTESİ, TEMEL TIP BİLİMLERİ BÖLÜMÜ, 2015 - Continues

Assistant Professor, Eskisehir Osmangazi University, TIP FAKÜLTESİ, TEMEL TIP BİLİMLERİ BÖLÜMÜ, 2014 - 2015

Expert, Eskisehir Osmangazi University, TIP FAKÜLTESİ, TEMEL TIP BİLİMLERİ BÖLÜMÜ, 2009 - 2014

### Academic and Administrative Experience

Post Doctoral Fellow, Boston University, School of Medicine, Alzheimer' Disease Center, 2016 - 2016

Post Doctoral Associate, Boston University, School of Medicine, Alzheimer's Disease Center, 2010 - 2012

### Courses

FİZYOLOJİ (TIP FAKÜLTESİ), Undergraduate, 2016 - 2017

DİŞ HEKİMLİĞİ FİZYOLOJİ, Undergraduate, 2016 - 2017

EBELİK FİZYOLOJİ, Undergraduate, 2016 - 2017

HEMSİRELİK FİZYOLOJİ, Undergraduate, 2016 - 2017

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

- The Effects of Carvacrol on Transient Receptor Potential (TRP) Channels in an Animal Model of Parkinson's Disease**

Akan T., AYDIN Y., KORKMAZ O. T., ULUPINAR E., SAYDAM F.

NEUROTOXICITY RESEARCH, vol.41, no.6, pp.660-669, 2023 (SCI-Expanded)

- II. **Vasoactive Intestinal Peptide Differentially Modulates Neurogenesis in Experimental Parkinson's Disease Models**  
MERAL EVİŞ C. C., KORKMAZ O. T., Tuncel N.  
ACTA PHYSIOLOGICA, pp.62, 2023 (SCI-Expanded)
- III. **Neuroprotective Effects of Vasoactive Intestinal Peptide (VIP) and Pituitary Adenylate Cyclase-Activating Polypeptide-38 (PACAP-38) in Amyotrophic Lateral Sclerosis (ALS) Mouse Model**  
Yilmaz I. T., KORKMAZ O. T., KUŞ G., Kaya E. M. O., MERAL EVİŞ C. C., ESER M., ULUPINAR E., Tuncel N.  
ACTA PHYSIOLOGICA, pp.24, 2023 (SCI-Expanded)
- IV. **Investigation of the pharmacokinetic properties and theoretical chemical activities of 7,8-dihydroxyflavone and 4'-dimethylamino-7,8-dihydroxyflavone**  
Karakaya M. F., Gokalp F., ŞENER E., KORKMAZ O. T.  
Current Pharmaceutical Analysis, vol.19, no.4, pp.317-323, 2023 (SCI-Expanded)
- V. **The Relationship between Parkinson's Disease and TRP Channels; Possible Therapeutic Effects of Carvacrol**  
Koca T., Aydın Y., Korkmaz O. T., Ulupınar E., Saydam F.  
ACTA PHYSIOLOGICA, vol.237, no.5727, pp.70, 2023 (SCI-Expanded)
- VI. **Can Brain-derived Neurotrophic Factor (BDNF) Mimetics be a Way Out for Neurodegenerative Diseases?**  
KORKMAZ O. T.  
Current Pharmaceutical Design, vol.29, no.4, pp.246-250, 2023 (SCI-Expanded)
- VII. **Vasoactive intestinal peptide (VIP) conducts the neuronal activity during absence seizures: GABA seems to be the main mediator of VIP**  
KORKMAZ O. T., Arkan S., Öncü-Kaya E. M., ATEŞ N., Tunçel N.  
Neuroscience Letters, vol.765, 2021 (SCI-Expanded)
- VIII. **Determination of Ochratoxin-A in the brain microdialysates and plasma of awake, freely moving rats using ultra high performance liquid chromatography fluorescence detection method**  
Kaya E. M. O., KORKMAZ O. T., Ugur D. Y., ŞENER E., Tuncel A. N., Tuncel M.  
JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES, vol.1125, 2019 (SCI-Expanded)
- IX. **Vasoactive Intestinal Peptide Decreases -Amyloid Accumulation and Prevents Brain Atrophy in the 5xFAD Mouse Model of Alzheimer's Disease**  
Korkmaz O. T., Ay H., Aytan N., Carreras I., Kowall N. W., Dedeoglu A., Tuncel N.  
JOURNAL OF MOLECULAR NEUROSCIENCE, vol.68, no.3, pp.389-396, 2019 (SCI-Expanded)
- X. **Advantages of Vasoactive Intestinal Peptide for the Future Treatment of Parkinson's Disease**  
KORKMAZ O. T., Tuncel N.  
CURRENT PHARMACEUTICAL DESIGN, vol.24, no.39, pp.4693-4701, 2018 (SCI-Expanded)
- XI. **Modulation of Corpus Striatum Neurochemistry by Astrocytes and Vasoactive Intestinal Peptide (VIP) in Parkinsonian Rats**  
Yelkenli I. H., Ulupınar E., Korkmaz O. T., Şener E., Kuş G., Filiz Z., Tuncel N.  
JOURNAL OF MOLECULAR NEUROSCIENCE, vol.59, pp.280-289, 2016 (SCI-Expanded)
- XII. **7,8-Dihydroxyflavone improves motor performance and enhances lower motor neuronal survival in a mouse model of amyotrophic lateral sclerosis**  
KORKMAZ O. T., Aytan N., Carreras I., Choi J., Kowall N. W., Jenkins B. G., Dedeoglu A.  
NEUROSCIENCE LETTERS, vol.566, pp.286-291, 2014 (SCI-Expanded)
- XIII. **Vasoactive Intestinal Peptide Enhances Striatum Plasticity and Prevents Dopaminergic Cell Loss in Parkinsonian Rats**  
Korkmaz O. T., Ay H., Ulupınar E., Tuncel N.  
JOURNAL OF MOLECULAR NEUROSCIENCE, vol.48, no.3, pp.565-573, 2012 (SCI-Expanded)
- XIV. **Antioxidant and Anti-Apoptotic Activity of Vasoactive Intestinal Peptide (VIP) Against 6-Hydroxy Dopamine Toxicity in the Rat Corpus Striatum**

- Tuncel N., KORKMAZ O. T., Tekin N., ŞENER E., AKYÜZ F., Inal M.  
JOURNAL OF MOLECULAR NEUROSCIENCE, vol.46, no.1, pp.51-57, 2012 (SCI-Expanded)
- XV. **A simple and sensitive LC-ESI-MS (ion trap) method for the determination of bupropion and its major metabolite, hydroxybupropion in rat plasma and brain microdialysates**  
YENİCELİ D., ŞENER E., KORKMAZ O. T., Dogrukol-Ak D., Tuncel N.  
TALANTA, vol.84, no.1, pp.19-26, 2011 (SCI-Expanded)
- XVI. **Vasoactive Intestinal Peptide (VIP) Treatment of Parkinsonian Rats Increases Thalamic Gamma-Aminobutyric Acid (GABA) Levels and Alters the Release of Nerve Growth Factor (NGF) by Mast Cells**  
KORKMAZ O. T., Tuncel N., Tuncel M., Oncu E. M., ŞAHİNTÜRK V., Celik M.  
JOURNAL OF MOLECULAR NEUROSCIENCE, vol.41, no.2, pp.278-287, 2010 (SCI-Expanded)
- XVII. **The Effects of Vasoactive Intestinal Peptide on Dura Mater Nitric Oxide Levels and Vessel-Contraction Responses in Sympsectomized Rats**  
TÖRE F., KORKMAZ O. T., Dogrukol-Ak D., Tuncel N.  
JOURNAL OF MOLECULAR NEUROSCIENCE, vol.41, no.2, pp.288-293, 2010 (SCI-Expanded)
- XVIII. **Determination of carbamazepine and its main metabolite carbamazepine-10, 11-epoxide in rat brain microdialysate and blood using ESI-LC-MS (ion trap)**  
Sener E., KORKMAZ O. T., Yeniceli D., Dogrukol-Ak D., Tuncel M., Tuncel N.  
CHROMATOGRAPHIA, vol.66, 2007 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Parkinson Hastalığı ve TRP Kanallarının İlişkisi; Karvakrol'ün Olası Tedavi Edici Etkileri**  
Koca T., Aydın Y., Korkmaz O. T., Ulupınar E., Saydam F.  
47.Ulusal Fizyoloji Kongresi, Antalya, Turkey, 1 - 04 November 2022, pp.75
- II. **Therapeutic efficacy of vasoactive intestinal peptide (VIP) and pituitary adenylate cyclase activating polypeptide (PACAP) in amyotrophic lateral sclerosis (ALS) mouse model**  
Yılmaz I. T., KORKMAZ O. T., KUŞ G., ÖNCÜ KAYA E. M., MERAL EVİŞ C. C., ESER M., ULUPINAR E., TUNÇEL A. N.  
The 15th International Symposium on VIP, PACAP and Related Peptides, Osaka, Japan, 30 October 2022
- III. **Investigation of the effects of 7,8-Dihydroxyflavone on motor neurons in amyotrophic lateral sclerosis model mice**  
KORKMAZ O. T.  
HODJA AKHMET YASSAWI 6th International Conference on Scientific Research, Lankaran, Azerbaijan, 13 May 2022
- IV. **Bir seramidöz inhibitörü olan N-Oleylethanolamine bileşiğinin AS49 ve Beas-2B hücreleri üzerindeki sitotoksik ve morfolojik değişimlerinin araştırılması**  
ÇÖMLEKÇİ E., İZGÖRDÜ H., VEJSELOVA SEZER C., KORKMAZ O. T., KUTLU H. M.  
1. INTERNATIONAL MULTIDISCIPLINARY CANCER RESEARCH CONGRESS, 18 - 22 September 2019
- V. **LC-MS/MS Method for the Determination of Lamotrigine in Human Plasma**  
ŞENER E., AK D., KORKMAZ O. T.  
INTERNATIONAL CHEMISTRY BIOLOGY CONFERENCE'19, 1 - 05 August 2019
- VI. **Development of UHPLC-FLD method for the determination of T-2 and HT-2 toxins in rat plasma and brain microdialysate samples**  
ÖNCÜ KAYA E. M., KORKMAZ O. T., Sener Z. A.  
8th Black Sea Basin Conference on Analytical Chemistry, İstanbul, Turkey, 9 - 11 May 2018
- VII. **VASOACTIVE INTESTINAL PEPTIDE (VIP) DECREASES  $\beta$ -AMYLOID ACCUMULATION AND PREVENTS BRAIN ATROPHY IN 5XFAD MOUSE MODEL OF ALZHEIMER'S DISEASE**  
KORKMAZ O. T., AY H., AYTAN N., CARRERAS I., KOWALL N., DEDEOĞLU A., TUNÇEL A. N.  
13. International Symposium on VIP, PACAP and related peptides, 3 - 07 December 2017
- VIII. **VIP, VPAC-1 AND VPAC-2 EXPRESSION IN ADIPOCYTES CELLS OF INTERSCAPULAR AND SUBCUTANEOUS TISSUE: EFFECTS OF COLDEXPOSURE**

DEMİRBAŞ B., KORKMAZ O. T., SAYDAM F., CHALDAKOV G., TUNÇEL A. N.

13. International Symposium on VIP, PACAP and Related Peptides, 3 - 07 December 2017

- IX. **Determination of Mycotoxin in Rat Plasma Samples by Ultra High Performance Liquid Chromatography with Fluorescence Detection**  
ÖNCÜ KAYA E. M., KORKMAZ O. T., YENİCELİ UĞUR D., TUNÇEL A. N., TUNCEL M., AKDER O.  
10th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016
- X. **A Simple and Sensitive UHPLC Method for The Determination of Ochratoxin A and Its Application to Biological Samples**  
ÖNCÜ KAYA E. M., KORKMAZ O. T., AKDERE O., YENİCELİ UĞUR D., TUNÇEL A. N., TUNCEL M.  
28. Ulusal Kimya Kongresi, Mersin, Turkey, 15 - 21 August 2016
- XI. **Alteration of VIP VPAC1 and VPAC2 gene expression in brown and white adipose tissues of the rats during cold exposure**  
KORKMAZ O. T., DEMİRBAŞ B., SAYDAM F., DEĞİRMENCİ İ., CHALDAKOV G., TUNÇEL A. N.  
Regulatory Peptides 2016, 11 - 15 July 2016
- XII. **The effects of vasoactive intestinal peptide VIP on absence epilepsy**  
ARKAN S., KORKMAZ O. T., KARSON A., ATEŞ N., TUNÇEL A. N.  
The 10th FENS Forum of Neuroscience, 2 - 06 July 2016
- XIII. **The chronic and acute effects of VIP on absence seizures**  
ARKAN S., KORKMAZ O. T., KARSON A., ATEŞ N., TUNÇEL A. N.  
12th International Symposium on VIP-PACAP and related peptides, Nevşehir, Turkey, 21 - 26 September 2015
- XIV. **The effects of VIP application on somatosensorial cortex of WAG Rij rats**  
KORKMAZ O. T., ÖNCÜ KAYA E. M., ARKAN S., KARSON A., ATEŞ N., TUNÇEL A. N., KILIÇDOĞAN C., DEMİRBAŞ B., AKDERE O.  
12th International Symposium on VIP-PACAP and Related Peptides, Nevşehir, Turkey, 21 - 26 September 2015
- XV. **Modulated corpus striatal neurochemistry by 6 OHDA astrocytes and VIP in parkinsonian rats astrocytes are vanguard defensive cell and VIP prefers neurons to induce ADNP and GAD**  
ULUPINAR E., yelkenli i., KORKMAZ O. T., ŞENER E., KUŞ G., FİLİZ Z., TUNÇEL A. N.  
12th International Symposium on VIP-PACAP and Related Peptides, 21 - 26 September 2015
- XVI. **LC MS MS method for the determination of levetiracetam in rat brain microdialysate**  
AK D., ŞENER E., KORKMAZ O. T., GENÇ L.  
11th International Symposium on Pharmaceutical Sciences, 9 - 12 June 2015
- XVII. **LC MS MS method development for the new antiepileptic drugs from patient s blood**  
ŞENER E., AK D., KORKMAZ O. T., TORUN Ş., GENÇ L., TUNÇEL A. N.  
HPLC 2014, New Orleans, United States Of America, 11 - 15 May 2014
- XVIII. **Simultaneous determination of zonosamide carbamazepine phenytoin and ethosuximide by LC PDA in rat plasma**  
ŞENER E., KIRAL M., BEKTAŞ TÜRKMEN N., KORKMAZ O. T., YENİCELİ D.  
HPLC 2014, New Orleans, United States Of America, 11 - 15 May 2014
- XIX. **Voltammetric determination of neurotransmitter dopamine in rat brain microdilysate at a carbon paste electrode modified with poly glutamic acid**  
TALAY PINAR P., ŞENTÜRK Z., TUNÇEL A. N., KORKMAZ O. T.  
10th international electrochemistry meeting in Turkey, Konya, Turkey, 4 - 08 September 2013
- XX. **Electrochemical determination of neurotransmitter serotonin in rat brain microdialysate using poly glutamic acid modified carbon electrode**  
TALAY PINAR P., ŞENTÜRK Z., TUNÇEL A. N., KORKMAZ O. T.  
XVII European conference on analytical chemistry ( Euroanalysis 2013), Warszawa, Poland, 25 - 29 August 2013
- XXI. **Vasoactive Intestinal Peptide (VIP) enhances the striatal plasticity and prevents dopaminergic cell loss in Parkinsonian rats**  
Tuncel N., KORKMAZ O. T., ULUPINAR E., AY H.  
10th International Symposium on VIP-PACAP and Related Peptides, Eilat, Israel, 13 - 16 December 2011, vol.48
- XXII. **7 8 Dihydroxyflavone improves motor performance and enhances lower motor neuronal survival in**

**a mouse model of amyotrophic lateral sclerosis**

KORKMAZ O. T.

Neuroscience 2012, New Orleans, United States Of America, 15 - 19 October 2012

- XXIII. **A simple and sensitive LC ESI MS method for the determination of bupropion and its major metabolite hydroxybupropion in fat plasma and brain microdialysates**  
YENİCELİ D., ŞENER E., KORKMAZ O. T., AK D., TUNÇEL A. N.  
10th International symposium on pharmaceutical sciences, Ankara, Turkey, 26 - 29 June 2012
- XXIV. **Vasoactive Intestinal Peptide Enhances Striatal Plasticity and Prevents Dopaminergic Cell Loss in Parkinsonian Rats**  
TUNÇEL A. N., KORKMAZ O. T., AY H., ULUPINAR E.  
10th International symposium on VIP-PACAP and related peptides, Eliat, Israel, 13 - 16 December 2011
- XXV. **Anti oxidant and anti apoptotic actions of vasoactive intestinal peptide on the parkinsonian rats**  
KORKMAZ O. T., TEKİN N., ŞENER E., TUNÇEL A. N., AKYÜZ F., İNAL M.  
European neuropeptide conference, Boston, 22 - 25 May 2011
- XXVI. **Antioxidant and anti-apoptotic activity of vasoactive intestinal peptide (VIP) against 6-hydroxy dopamine toxicity in the rat corpus striatum**  
KORKMAZ O. T., TUNÇEL N., TEKİN N., ŞENER E., AKYÜZ F., İNAL M.  
Summer Neuropeptide Conference and the European Neuropeptide Club (ENC) Meeting, 22 - 25 May 2011, pp.173-201
- XXVII. **Vazoaktif intestinal peptidin dünü bugünü ve yarını**  
TUNÇEL A. N., KORKMAZ O. T.  
36. Ulusal Fizyoloji Kongresi, Edirne, Turkey, 14 - 17 September 2010
- XXVIII. **Deneysel Parkinson modelinde vazoaktif intestinal peptit (VIP)'xxin antioksidan ve antiapoptotik etkileri**  
KORKMAZ O. T., TEKİN N., ŞENER E., TUNÇEL N., AKYÜZ F., İNAL M.  
9.Ulusal Sinirbilimleri Kongresi, Turkey, 13 - 17 April 2010, vol.16, pp.140
- XXIX. **The effects of vasoactive intestinal peptide on dura mater nitric oxide levels and vessel contraction responses in sympathectomized rats**  
TÖRE F., KORKMAZ O. T., TUNÇEL A. N., ŞENER E.  
8. Ulusal Sinirbilim Kongresi, Bolu, Turkey, 20 - 24 April 2009
- XXX. **VASOACTIVE INTESTINAL PEPTIDE (VIP) TREATMENT OF PARKINSONIAN RATS INCREASES IN THALAMIC GAMMA AMINO BUTYRIC ACID (GABA) LEVELS, AND CHANGES NERVE GROWTH FACTOR (NGF) RELEASE OF BRAIN MAST CELLS**  
Tuncel N., KORKMAZ O. T., Tuncel M., Oncu E. M., Sahinturk V., Celik M.  
Joint Meeting of the European-Neuropeptides-Club/Summer Neuropeptides Conference, Salzburg, Austria, 20 - 23 July 2009, vol.43, pp.424
- XXXI. **Vasoactive intestinal peptide treatment of parkinsonian rats increases in thalamic GABA levels and changes NGF release of brain mast cels**  
KORKMAZ O. T., TUNÇEL A. N., TUNÇEL M., ÖNCÜ KAYA E. M., ŞAHİNTÜRK V., ÇELİK M.  
Neuropeptide festival, Salzburg, Austria, 20 - 23 July 2009
- XXXII. **The determination of GABA using HPLC with fluorescence detection and its application to brain microdialysates**  
ÖNCÜ KAYA E. M., KORKMAZ O. T., TUNÇEL M., TUNÇEL A. N.  
International symposium on capillary chromatography and electrophoresis, Portland, United States Of America, 17 - 21 May 2009
- XXXIII. **Determination of carbamazepine and its main metabolite carbamazepine 10 11 epoxide in rat brain microdialysate and blood using ESI LC MS Ion trap**  
ŞENER E., KORKMAZ O. T., YENİCELİ D., AK D., TUNÇEL M., TUNÇEL A. N.  
Pharmaceuticall science world congress 3. PSWC, Amsterdam, Netherlands, 22 - 25 December 2007

## **Activities in Scientific Journals**

Journal of Alzheimers & Neurodegenerative Diseases, Publication Committee Member, 2015 - Continues  
Advances in Parkinson's Disease, Publication Committee Member, 2012 - Continues

## **Memberships / Tasks in Scientific Organizations**

1003 Nörodegeneratif Hastalıklar, Member of Advisory Board, 2015 - 2016, Turkey

## **Metrics**

Publication: 51  
Citation (WoS): 261  
Citation (Scopus): 291  
H-Index (WoS): 8  
H-Index (Scopus): 9

## **Scholarships**

İbuprofenin Tau Patolojisine Etkileri, TÜBİTAK, 2010 - 2011

## **Non Academic Experience**

Boston University School of Medicine Department of Neurology  
Boston University School of Medicine Department of Neurology