

## Prof. SELCEN ABİDİN

### Personal Information

**Office Phone:** [+90 462 377 7807](tel:+904623777807)

**Email:** [sabidin@ktu.edu.tr](mailto:sabidin@ktu.edu.tr)

**Web:** <https://avesis.ktu.edu.tr//sabidin>

**Address:** Karadeniz Teknik Üniversitesi Tıp Fakültesi Biyofizik Abd, 61080 Trabzon

### International Researcher IDs

ScholarID: TRJ2FzMAAAAJ

ORCID: 0000-0002-5843-5539

Publons / Web Of Science ResearcherID: AAR-4191-2020

ScopusID: 14032692700

Yoksis Researcher ID: 37250

### Education Information

Doctorate, Ruhr-Universität Bochum, Tıp Fakültesi, Nörofizyoloji, Germany 2003 - 2008

Postgraduate, Akdeniz University, Institute Of Health Sciences , Biyofizik Abd, Turkey 2000 - 2003

Undergraduate, Middle East Technical University, Fen Edebiyat Fakültesi, Biyoloji Bölümü, Turkey 1995 - 2000

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Effects of Repetitive Transcranial Magnetic Stimulation on Visual Evoked Potentials, EEG and Immediate Early Gene Expression, Ruhr-Universität Bochum, Tıp Fakültesi, Nörofizyoloji, 2008

Postgraduate, Sülfid ve Stresin Görsel Uyarılma Potansiyelleri Üzerine Etkilerinin Araştırılması, Akdeniz University, Tıp Fakültesi, Biyofizik Abd, 2003

### Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biophysics, Human Physiology, Neurophysiology

### Academic Titles / Tasks

Assistant Professor, Karadeniz Technical University, Tıp Fakültesi, Temel Tıp, 2010 - 2014

Lecturer PhD, Karadeniz Technical University, Tıp Fakültesi, Temel Tıp, 2009 - 2010

Research Assistant, Akdeniz University, Faculty Of Medicine, Temel Tıp Bilimleri, 2001 - 2003

### Courses

biyofizik, Undergraduate, 2016 - 2017

Fizik-Biyofizik, Undergraduate, 2016 - 2017

Fizik-Biyofizik, Undergraduate, 2014 - 2015

Fizik-Biyofizik, Undergraduate, 2014 - 2015

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

- I. **Title: A Boron-Chelating Piperazine-Tethered Schiff Base Can Modulate Excitability in Brain Slices in a Specific Frequency Range**  
BAŞOĞLU H., DEĞİRMENCİOĞLU İ., ÖZTÜRK H., Yorulmaz N., ABİDİN S., ABİDİN İ.  
ChemistrySelect, vol.8, no.48, 2023 (SCI-Expanded)
- II. **Sensory-motor performance and neurochemical effects in the cerebral cortex of brain-derived neurotrophic factor heterozygous mice fed a high-cholesterol diet.**  
KESER H., Girit O. B., Abidin S., Bilgin M. D., ALVER A., ABİDİN İ.  
Acta neurobiologiae experimentalis, vol.83, no.1, pp.1-9, 2023 (SCI-Expanded)
- III. **Fisetin decreases the duration of ictal-like discharges in mouse hippocampal slices**  
Ozturk H., Basoglu H., Yorulmaz N., Aydin-Abidin S., Abidin I.  
JOURNAL OF BIOLOGICAL PHYSICS, vol.48, no.3, pp.355-368, 2022 (SCI-Expanded)
- IV. **The regulation of adipokines related to obesity and diabetes is sensitive to BDNF levels and adipose tissue location**  
Akca I. I., Bodur A., Kahraman C., Abidin İ., Abidin S., Alver A.  
HORMONES-INTERNATIONAL JOURNAL OF ENDOCRINOLOGY AND METABOLISM, vol.21, no.2, pp.295-303, 2022 (SCI-Expanded)
- V. **Phoenixin-14 reduces the frequency of interictal-like events in mice brain slices**  
KALKAN Ö. F., ŞAHİN Z., ÖZTÜRK H., KESER H., ABİDİN S., ABİDİN İ.  
EXPERIMENTAL BRAIN RESEARCH, vol.239, no.9, pp.2841-2849, 2021 (SCI-Expanded)
- VI. **The TrkB agonist 7,8-dihydroxyflavone improves sensory-motor performance and reduces lipid peroxidation in old mice.**  
Keser H., Dođramacı Ş., Şahin E., Sağlam N., Erdem M., Alver A., Aydin-Abidin S.  
General physiology and biophysics, vol.39, no.5, pp.471-479, 2020 (SCI-Expanded)
- VII. **Renal response to tunicamycin-induced endoplasmic reticulum stress in BDNF heterozygous mice**  
CIRRIK S., HACIOĞLU G., Ayyildiz S. N., TEZCAN B., ABİDİN İ., Aydin-Abidin S., NOYAN T.  
ADVANCES IN CLINICAL AND EXPERIMENTAL MEDICINE, vol.28, no.9, pp.1161-1170, 2019 (SCI-Expanded)
- VIII. **Endoplasmic reticulum stress in the livers of BDNF heterozygous knockout mice**  
CıRRİK S., HACIOGLU G., Abidin İ., Aydın-Abidin S., NOYAN T.  
ARCHIVES OF PHYSIOLOGY AND BIOCHEMISTRY, vol.125, no.4, pp.378-386, 2019 (SCI-Expanded)
- IX. **7,8-Dihydroxyflavone potentiates ongoing epileptiform activity in mice brain slices**  
Aydin-Abidin S., Abidin İ.  
NEUROSCIENCE LETTERS, vol.703, pp.25-31, 2019 (SCI-Expanded)
- X. **Effect of a high sucrose and high fat diet in BDNF ( plus /-) mice on oxidative stress markers in adipose tissues**  
Bodur A., Ince I., Kahraman C., Abidin İ., Aydin-Abidin S., Alver A.  
ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol.665, pp.46-56, 2019 (SCI-Expanded)
- XI. **Neuronal excitability and spontaneous synaptic transmission in the entorhinal cortex of BDNF heterozygous mice**  
Abidin İ., Aydin-Abidin S., MITTMANN T.  
NEUROSCIENCE LETTERS, vol.690, pp.69-75, 2019 (SCI-Expanded)
- XII. **Brain-derived neurotrophic factor (BDNF) heterozygous mice are more susceptible to synaptic protein loss in cerebral cortex during high fat diet**  
Abidin İ., Aydin-Abidin S., BODUR A., İNCE İ., Alver A.

ARCHIVES OF PHYSIOLOGY AND BIOCHEMISTRY, vol.124, no.5, pp.442-447, 2018 (SCI-Expanded)

- XIII. **Evaluation of the Role of Chronic Daily Melatonin Administration and Pinealectomy on Penicillin-Induced Focal Epileptiform Activity and Spectral Analysis of ECoG in Rats: An In Vivo Electrophysiological Study**  
Yildirim M., AYDIN-ABIDIN S., ABİDİN İ., Akca M., CANPOLAT S., CANSU A.  
NEUROCHEMICAL RESEARCH, vol.38, no.8, pp.1672-1685, 2013 (SCI-Expanded)
- XIV. **Chronic application of topiramate and carbamazepine differentially affects the EEG and penicillin-induced epileptiform activity in rats**  
Aydin-Abidin S., Yildirim M., ABİDİN İ., CANSU A.  
NEUROLOGICAL RESEARCH, vol.34, no.3, pp.246-251, 2012 (SCI-Expanded)
- XV. **Comparison of focally induced epileptiform activities in C57BL/6 and BALB/c mice by using in vivo EEG recording**  
Aydin-Abidin S., Yildirim M., Abidin I., Akca M., CANSU A.  
NEUROSCIENCE LETTERS, vol.504, no.2, pp.165-169, 2011 (SCI-Expanded)
- XVI. **Penicillin induced epileptiform activity and EEG spectrum analysis of BDNF heterozygous mice: An in vivo electrophysiological study**  
ABİDİN İ., Yildirim M., AYDIN-ABIDIN S., KALAY E., CANSU A., Akca M., MITTMANN T.  
BRAIN RESEARCH BULLETIN, vol.86, pp.159-164, 2011 (SCI-Expanded)
- XVII. **Theta burst and conventional low-frequency rTMS differentially affect GABAergic neurotransmission in the rat cortex**  
Trippe J., Mix A., Aydin-Abidin S., Funke K., Benali A.  
EXPERIMENTAL BRAIN RESEARCH, vol.199, pp.411-421, 2009 (SCI-Expanded)
- XVIII. **Locus Coeruleus Activation Facilitates Memory Encoding and Induces Hippocampal LTD that Depends on beta-Adrenergic Receptor Activation**  
Lemon N., Aydin-Abidin S., Funke K., Manahan-Vaughan D.  
CEREBRAL CORTEX, vol.19, no.12, pp.2827-2837, 2009 (SCI-Expanded)
- XIX. **High- and low-frequency repetitive transcranial magnetic stimulation differentially activates c-Fos and zif268 protein expression in the rat brain**  
Aydin-Abidin S., Trippe J., Funke K., EYSEL U. T., Benali A.  
EXPERIMENTAL BRAIN RESEARCH, vol.188, no.2, pp.249-261, 2008 (SCI-Expanded)
- XX. **Effects of repetitive TMS on visually evoked potentials and EEG in the anaesthetized cat: dependence on stimulus frequency and train duration**  
ABİDİN S., Moliadze V., Eysel U. T., Funke K.  
JOURNAL OF PHYSIOLOGY-LONDON, vol.574, no.2, pp.443-455, 2006 (SCI-Expanded)
- XXI. **Changes in visual evoked potentials, lipid peroxidation and antioxidant enzymes in rats exposed to restraint stress: effect of L-carnitine.**  
Derin N., ABİDİN S., Yargıçoğlu P., Agar A.  
INTERNATIONAL JOURNAL OF NEUROSCIENCE, vol.116, no.3, pp.205-221, 2006 (SCI-Expanded)
- XXII. **The effect of chronic restraint stress and sulfite on visual evoked potentials (VEPs): Relation to lipid peroxidation**  
Aydin S., yargıçoğlu p., DERIN N., Aliciguzel Y., Abidin I., AGAR A.  
FOOD AND CHEMICAL TOXICOLOGY, vol.43, no.7, pp.1093-1101, 2005 (SCI-Expanded)
- XXIII. **The effect of chronic restraint stress on spatial learning and memory: relation to oxidant stress.**  
Abidin İ., Yargıçoğlu P., Açar A., Gümüşlü S., ABİDİN S., Öztürk O., Şahin E.  
INTERNATIONAL JOURNAL OF NEUROSCIENCE, vol.114, no.5, pp.683-699, 2004 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Effects of housing conditions on stress, depressive like behavior and sensory-motor performances of C57BL/6 mice**

- Abidin İ., Keser H., Şahin E., Öztürk H., Başoğlu H., Alver A., Aydın-Abidin S.  
LABORATORY ANIMAL RESEARCH, vol.40, no.1, 2024 (ESCI)
- II. **Investigation of In Silico Properties of [5-Hydroxy-7-(Pentyloxy)-2-Phenyl-4h-Chromen-4-One] molecule and its Effects on In-Vitro Epileptiform Activation in Brain Slices**  
BAŞOĞLU H., ÖZTÜRK H., YORULMAZ N., ABİDİN S., ABİDİN İ.  
Acta Medica Nicomedia, vol.6, 2023 (Peer-Reviewed Journal)
- III. **Flavonoidlerin Beyin Fonksiyonu Üzerindeki Potansiyellerini Keşfetmek: Üç Fenolik Bileşiğin Beyin Elektriksel Aktivitesi Üzerindeki Etkileri**  
ÖZTÜRK H., BAŞOĞLU H., ABİDİN S., ABİDİN İ.  
Harran Üniversitesi Tıp Fakültesi Dergisi, 2023 (Peer-Reviewed Journal)
- IV. **Investigation of The Effects of Endogenous BDNF on Kainic Acid Induced Seizures**  
Abidin S., Keser H., Şahin E., Alver A., Abidin İ.  
Farabi Tıp Dergisi, vol.2, no.1, pp.8-15, 2023 (Peer-Reviewed Journal)
- V. **L-Theanine Reduces Epileptiform Activity In Brain Slices**  
BAŞOĞLU H., ÖZTÜRK H., KESER H., ABİDİN S., ABİDİN İ.  
Akdeniz Tıp Dergisi, vol.8, pp.121-127, 2022 (Peer-Reviewed Journal)
- VI. **Effects of BDNF deficiency and endoplasmic reticulum stress on the GABAergic system**  
Hacıoğlu G., Cırrık S., Yüzüak H., Abidin S., Abidin İ.  
Pamukkale Tıp Dergisi, vol.14, no.4, pp.2, 2021 (Peer-Reviewed Journal)
- VII. **Apoptotic Effects of Reduced Brain Derived Neurotrophic Factor (BDNF) on Mouse Liver and Kidney**  
Tezcan B., Hacıoğlu G., ABİDİN S., ABİDİN İ.  
Dicle Tıp Dergisi, vol.44, no.4, pp.315-324, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Kronik Beyin Kaynaklı Nörotrofik Faktör (BDNF) eksikliğinin duyuşal motor performanslara etkisi**  
KESER H., ABİDİN S., ABİDİN İ.  
17. Ulusal Sinirbilim Kongresi, 4 - 07 April 2019
- II. **BDNF heterozigot fare hipokampus ve entorhinal korteksinde yüksek frekanslı dalgalanmaların incelenmesi.**  
ABİDİN İ., ABİDİN S.  
17. Ulusal Sinirbilim Kongresi, 4 - 07 April 2019
- III. **Tirozin Kinaz-B reseptör agonisti 7,8-dihidroksiflavon'un fare beyin kesitlerinde oluşturulan epilepsi benzeri aktiviteye etkileri.**  
ABİDİN İ., ABİDİN S.  
17. Ulusal Sinirbilim Kongresi, 4 - 07 April 2019
- IV. **BDNF eksikliğinin ve endoplazmik retikulum stresinin GABAerjik sistem üzerine etkiler**  
HACIOĞLU DERVİŞOĞLU G., CIRRIK S., ABİDİN S., ABİDİN İ.  
17. Ulusal Sinirbilim Kongresi, Turkey, 4 - 07 April 2019
- V. **Evaluation of FNDC5/irisin levels of BDNF heterozygous mice**  
DOĞRAMACI Ş., ERDEM M., ALVER A., MENTEŞE A., ABİDİN S., BODUR A., KARAHAN S. C.  
FEBS OPEN BIO, 1 - 05 July 2018
- VI. **Azaltılmış beyin kaynaklı nörotrofik faktörün (BDNF), fare karaciğer ve böbrek dokusuna apoptotik etkileri**  
TEZCAN B., HACIOĞLU DERVİŞOĞLU G., ABİDİN S., ABİDİN İ.  
14. Ulusal Histoloji ve Embriyoloji Kongresi 10-13 Mayıs 2018, Antalya - Türkiye, Turkey, 10 - 13 May 2018
- VII. **BDNF heterozigot farenin entorhinal korteksinde spontan sinaptik geçiş özellikleri.**  
ABİDİN İ., ABİDİN S.  
15. Ulusal Sinirbilim Kongresi, 7 - 10 May 2017

## **Metrics**

Publication: 41

Citation (WoS): 389

Citation (Scopus): 407

H-Index (WoS): 9

H-Index (Scopus): 10