

# Prof. İSMAİL ABİDİN

## Personal Information

Office Phone: [+90 462 377 7799](tel:+904623777799)

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

Fax Phone: [+90 462 325 1500](tel:+904623251500)

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

Web: <https://avesis.ktu.edu.tr//iabidin>

## International Researcher IDs

ScholarID: 53IIPIQAAAAJ

ORCID: 0000-0003-2510-9718

Publons / Web Of Science ResearcherID: AAR-2152-2020

ScopusID: 6506175324

Yoksis Researcher ID: 151389

## Education Information

Doctorate, Ruhr-Universitaet Bochum, Institut Für Neurophysiology, Biyofizik-Sinirbilim, Germany 2002 - 2006

Postgraduate, Akdeniz University, Institute Of Health Sciences , Biyofizik, Turkey 1999 - 2002

Undergraduate, Middle East Technical University, Fen Fakültesi, Biyoloji, Turkey 1993 - 1999

## Foreign Languages

German, B1 Intermediate

English, C1 Advanced

## Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biophysics

## Academic Titles / Tasks

Professor, Karadeniz Technical University, Tıp Fakültesi, Temel Tıp, 2018 - Continues

Assistant Professor, Karadeniz Technical University, Tıp Fakültesi, Temel Tıp, 2008 - 2013

Research Assistant PhD, Ruhr-Universitaet Bochum, Tıp Fakültesi, Neurophysiology, 2006 - 2008

Research Assistant, Ruhr-Universitaet Bochum, Tıp Fakültesi, Neurophysiology, 2002 - 2006

Research Assistant, Akdeniz University, Faculty Of Medicine, Temel Tıp Bilimleri, 1999 - 2002

## Academic and Administrative Experience

Karadeniz Technical University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2009 - Continues

## ADVISING 1 NESER

ABİDİN İ., Beyin Kaynaklı Nörotrofik Faktör (BDNF) heterozigot farelerde yüksek kolesterolü diyetin davranış ve nörokimyasal etkileri, Doctorate, H.KESER(Student), 2018

ABİDİN İ., Beyin Kaynaklı Nörotrofik Faktör (BDNF) heterozigot farelerde yüksek yağlı diyetin bazı adipokinlerin gen ekspresyonları üzerine etkisinin incelenmesi, Doctorate, İ.İnce(Student), 2017

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

- I. **Oleuropein Has Modulatory Effects on Systemic Lipopolysaccharide-Induced Neuroinflammation in Male Rats**  
Şahin S., Şahin E., Esenülkü G., Renda G., Gürgen S. G., Alver A., Abidin İ., Cansu A.  
JOURNAL OF NUTRITION, vol.154, no.4, pp.1282-1297, 2024 (SCI-Expanded)
- II. **Alarin potentiates ongoing epileptiform activity in rat brain slices: an in vitro electrophysiological study**  
KALKAN Ö. F., ÖZTÜRK H., ŞAHİN Z., BAŞOĞLU H., Abidin S. A., ABİDİN İ.  
Acta Neurobiologiae Experimentalis, vol.84, no.1, pp.35-42, 2024 (SCI-Expanded)
- III. **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)
- IV. **How does L-theanine treatment affect the levels of serum and hippocampal BDNF, insulin and adipocytokines in diabetic rats?**  
Hajizadeh Tekmeh H., Vanizor Kural B., Kör S., Arıkan Malkoç M., Yuluğ E., Kutlu A., Abidin İ., Örem A.  
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.667, pp.95-103, 2023 (SCI-Expanded)
- V. **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)
- VI. **7,8-Dihydroxyflavone alleviates Endoplasmic Reticulum Stress in cafeteria diet-induced metabolic syndrome**  
Sahin E., Saglam N., Erdem Ş., Alvuroglu E., Abidin İ., Yulug E., Alver A.  
LIFE SCIENCES, vol.306, 2022 (SCI-Expanded)
- VII. **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)
- VIII. **Reciprocal Effects of Adipose Tissue Denervation and High Fat Diet on Serum Metabolic Parameters and Adipokine Levels in Rats: A Long Term Study**  
Kahraman C., Rendi T. A., SAĞLAM N., Akca I. I., ABİDİN İ., ALVER A.  
JOURNAL OF EVOLUTIONARY BIOCHEMISTRY AND PHYSIOLOGY, vol.58, no.2, pp.410-417, 2022 (SCI-Expanded)
- IX. **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)
- X. **Renal response to tunicamycin-induced endoplasmic reticulum stress in BDNF heterozygous mice**  
CIRRIK S., HACIOĞLU G., Ayyildiz S. N., TEZCAN B., ABİDİN İ., Aydın-Abidin S., NOYAN T.  
ADVANCES IN CLINICAL AND EXPERIMENTAL MEDICINE, vol.28, no.9, pp.1161-1170, 2019 (SCI-Expanded)
- XI. **Endoplasmic reticulum stress in the livers of BDNF heterozygous knockout mice**  
CIRRIK S., HACIOĞLU G., Abidin İ., Aydın-Abidin S., NOYAN T.  
ARCHIVES OF PHYSIOLOGY AND BIOCHEMISTRY, vol.125, no.4, pp.378-386, 2019 (SCI-Expanded)
- XII. **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)

- XIII. **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)
- XIV. **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)
- XV. **Brain-derived neurotropic 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)
- XVI. **Assessment of Oxidative Stress Parameters of BDNF Heterozygous Mice in Acute Stress Model**  
HACIOĞLU G., ŞENTÜRK A., Ince I., ABİDİN İ.  
ACTA PHYSIOLOGICA, vol.215, pp.43, 2015 (SCI-Expanded)
- XVII. **Electrophysiological evidence on epileptiform activity enhanced by electrical stimulation of teeth in rats**  
ER K., Yildirim M., TAŞDEMİR T., Akca M., ABİDİN İ.  
NEUROLOGICAL RESEARCH, vol.36, no.7, pp.673-678, 2014 (SCI-Expanded)
- XVIII. **Comparison of the effects of new folkloric hemostatic agent on peripheral nerve function: an electrophysiologic study in rats**  
Pampu A. A., Yildirim M., TÜZÜNER T., BAYGIN Ö., ABİDİN İ., Dayisoylu E. H., Senel F. C.  
ORAL SURGERY ORAL MEDICINE ORAL PATHOLOGY ORAL RADIOLOGY, vol.115, no.4, 2013 (SCI-Expanded)
- XIX. **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)
- XX. **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)
- XXI. **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)
- XXII. **Myocardial perfusion alterations observed months after radiotherapy are related to the cellular damage**  
DOĞAN İ. S., SEZEN O., SÖNMEZ B., ZENGİN A. Y., YENİLMEZ E., YULUĞ E., ABİDİN İ., BAHAT Z.  
NUKLEARMEDIZIN-NUCLEAR MEDICINE, vol.49, no.6, pp.209-215, 2010 (SCI-Expanded)
- XXIII. **Impaired GABAergic inhibition in the visual cortex of brain-derived neurotrophic factor heterozygous knockout mice**  
Abidin I., EYSEL U. T., LESSMANN V., MITTMANN T.  
JOURNAL OF PHYSIOLOGY-LONDON, vol.586, no.7, pp.1885-1901, 2008 (SCI-Expanded)
- XXIV. **Reduced presynaptic efficiency of excitatory synaptic transmission impairs LTP in the visual cortex of BDNF-heterozygous mice**  
Abidin I., KOEHLER T., WEILER E., ZOIDL G., EYSEL U. T., LESSMANN V., MITTMANN T.  
EUROPEAN JOURNAL OF NEUROSCIENCE, vol.24, no.12, pp.3519-3531, 2006 (SCI-Expanded)
- XXV. **Marked changes in erythrocyte antioxidants and lipid peroxidation levels of rats exposed to acute, repeated and chronic restraint stress**

- SAHIN E., GUMUSLU S., OZTURK O., Abidin I., YARGICOGU P., AGAR A.  
PHARMAZIE, vol.59, no.12, pp.961-964, 2004 (SCI-Expanded)
- XXVI. **The effect of chronic restraint stress on spatial learning and memory: Relation to oxidant stress**  
Abidin I., YARGICOGU P., AGAR A., GUMUSLU S., Aydin S., OZTURK O., SAHIN E.  
INTERNATIONAL JOURNAL OF NEUROSCIENCE, vol.114, no.5, pp.683-699, 2004 (SCI-Expanded)
- XXVII. **Effects of N-nitro L-arginine methyl ester (L-NAME), a potent nitric oxide synthase inhibitor, on visual evoked potentials of rats exposed to different experimental stress models**  
YARGICOGU P., YARAS N., AGAR A., GUMUSLU S., Abidin I., BILMEN S.  
ACTA PHYSIOLOGICA SCANDINAVICA, vol.180, no.3, pp.307-316, 2004 (SCI-Expanded)
- XXVIII. **Effect of immobilization and cold stress on visual evoked potentials**  
YARAS N., YARGICOGU P., AGAR A., GUMUSLU S., Abidin I., OZDEMIR S.  
INTERNATIONAL JOURNAL OF NEUROSCIENCE, vol.113, no.8, pp.1055-1067, 2003 (SCI-Expanded)
- XXIX. **Training induced alterations of visual evoked potentials are not related to body temperature**  
OZKAYA Y., AGAR A., HACIOGLU G., YARGICOGU P., Abidin I., SENTURK U.  
INTERNATIONAL JOURNAL OF SPORTS MEDICINE, vol.24, no.5, pp.359-362, 2003 (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. **Sinirbilim Araştırmalarında Taze Beyin Kesitleri: Fizyolojik Yöntemler, Avantajları ve Kullanım Alanları**  
Öztürk H., Abidin İ.  
Journal of Harran University Medical Faculty, vol.18, no.3, pp.517-528, 2021 (Peer-Reviewed Journal)
- VII. **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)
- VIII. **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)
- IX. **Effects of chronic treatment with commonly used antiepileptic drugs on passive avoidance learning in prepubertal rats**  
YILDIRIM M., ABİDİN İ., CANSU A.

## Refereed Congress / Symposium Publications in Proceedings

- I. **BDNF heterozigot farenin entorhinal korteksinde spontan sinaptik geçiş özellikleri.**  
ABİDİN İ., ABİDİN S.  
15. Ulusal Sinirbilim Kongresi, 7 - 10 May 2017
- II. **Assessment of Oxidative Stress Parameters of BDNF Heterozygous Mice in Acute Stress Model**  
HACIOĞLU G., ŞENTÜRK A., ince i., ABİDİN İ.  
Fizyoloji kongresi, 01 September 2015
- III. **Neurotoxic Effects of Root-Canal-Sealers with Different Compounds on Rat-Sciatic-Nerves.**  
KILKIS B. T., ER K., TAŞDEMİR T., YILDIRIM M., TAŞKESEN F., AKÇA M., ABİDİN İ., TUMKAYA L., KALKAN Y., AYDIN-ABIDIN S., et al.  
46th Meeting of the Continental European Division of the International Association for Dental Research with the Scandinavian Division, Florence, Italy, 4 - 07 September 2013, pp.484
- IV. **Neurotoxic effects of root-canal-sealers with different compounds on rat-sciatic-nerves**  
Tuğ Kılkaş B., Er K., TAŞDEMİR T., YILDIRIM M., Taşkesen F., AKÇA M., ABİDİN İ., SERPER A.  
46th Meeting of the Continental European Division of the International Association for Dental Research (CED-IADR), Florence, Italy, 4 - 07 September 2013, pp.1
- V. **C57BL/6 ve BALB/c Fare Irklarında Fokal Epilepsi Benzeri Aktivitenin Karşılaştırılması.**  
AYDIN-ABIDIN S., YILDIRIM M., ABİDİN İ.  
24. Ulusal Biyofizik Kongresi, İstanbul, Turkey, 25 - 28 September 2012, pp.43
- VI. **Beyin Kaynaklı Nörotrofik Faktör (BDNF) heterozigot fare beyin korteksinde azalmış inhibisyon/eksitasyon dengesi ve farklı epilepsi benzeri aktivite özellikleri.**  
ABİDİN İ., YILDIRIM M., AYDIN-ABIDIN S., KALAY E., Mittmann T.  
24. Ulusal Biyofizik Kongresi, İstanbul, Turkey, 25 - 28 September 2012, pp.35
- VII. **Epileptiform aktivite oluşturulmuş ratlarda dişin elektrik stimülasyonunun olası etkileri.**  
ER K., YILDIRIM M., TAŞDEMİR T., AKÇA M., ABİDİN İ.  
Türk Endodonti Derneği 11. Uluslararası Kongresi, İstanbul, Turkey, 27 - 28 June 2012, pp.114-115
- VIII. **Comparison of the effects of new folkloric hemostatic agent on peripheral nerve function: an electrophysiological study in rats**  
Dayısoylu E. H., Pampu A. A., YILDIRIM M., TÜZÜNER T., BAYGIN Ö., ABİDİN İ., Senel F. C.  
2nd Balkan Association of Maxillofacial Surgery 5th ACBID International Conference, Antalya, Turkey, 25 - 29 May 2011, pp.31
- IX. **Beyin Kaynaklı Nörotrofik Faktör (BDNF) Heterozigot Fare Korteksinde GABAerjik Salınım Özellikleri ve EEG Analizi.**  
ABİDİN İ., YILDIRIM M., AYDIN-ABIDIN S., KALAY E., CANSU A., AKÇA M., EYSEL U. T., Mittmann T.  
10. Ulusal Sinirbilimleri Kongresi, İstanbul, Turkey, 9 - 12 April 2011, pp.82
- X. **Sıçanlarda Epileptiform Aktivite Üzerine Pinealektomi ve Ekzojen Melatoninin Etkisi.**  
YILDIRIM M., ABİDİN İ., CANPOLAT S., AYDIN-ABIDIN S., AKÇA M., CANSU A.  
10. Ulusal Sinirbilimleri Kongresi, İstanbul, Turkey, 9 - 12 April 2011, pp.90
- XI. **Prepubertal Dönem Boyunca Kullanılan Antiepileptik İlaçların Öğrenme Ve Hafıza Oluşumuna Etkileri.**  
YILDIRIM M., CANSU A., ABİDİN İ., CANPOLAT S.  
12. Ulusal Çocuk Nörolojisi Kongresi, Konya, Turkey, 26 - 29 May 2010, pp.135-136

## Supported Projects

ABİDİN İ., ALVER A., KALAY E., TUBITAK Project, BDNF (Beyin Kaynaklı Nörotrofik Faktör)'nin, yağ dokusunda diyete

bağlı adipokin salgılanması ve oksidatif strese etkisinin incelenmesi, 2014 - Continues

KURAL B., AZI MOHAMED S., KÖR S., MALKOÇ M., ABİDİN İ., YULUĞ E., ÖREM A., Project Supported by Higher Education Institutions, L-Theaninin Diyabetik Sıçanlarda Böbrek Dokusu Üzerine Etkilerinin İncelenmesi, 2021 - 2023

ABİDİN İ., ALVER A., ABİDİN S., ÖZTÜRK H., KESER H., Project Supported by Higher Education Institutions, Ventilasyonlu sistem kafeslerde ve klasik açık kafeslerde barındırılan farelerin kilo alımları depresyon durumlarının ve motor performanslarının karşılaştırılması, 2020 - 2022

KALAY E., KILIÇ A. O., YENİLMEZ E., ALİYAZICIOĞLU Y., SERDAR B., DEMİRBAĞ Z., KADIOĞLU A., DEĞİRMENCİOĞLU İ., DEMİR İ., KUTRUP B., et al., Project Supported by Higher Education Institutions, Karadeniz Teknik Üniversitesi Lazer Taramalı Konfokal Mikroskop Ünitesinin Kurulması, 2018 - 2019

ABİDİN S., ABİDİN İ., KESER H., Project Supported by Higher Education Institutions, Endojen Beyin Kaynaklı Nörotrofik Faktör (BDNF)'ün Kainik Asit Nörotoksitesine Etkisi, 2018 - 2019

ABİDİN İ., ABİDİN S., Project Supported by Higher Education Institutions, In vivo Transkraniyel Doğru Akım Uyarımının taze beyin kesitlerinde 4-AP ile oluşturulan epileptiform aktiviteye etkilerinin incelenmesi, 2016 - 2019

ABİDİN İ., ALVER A., Project Supported by Higher Education Institutions, Cerrahi Araştırma Merkezinin Hijyen Şartlarının Geliştirilmesi ile Kontaminasyon Risklerinin Azaltılması, 2016 - 2018

KALAY E., ER İ., DİNÇER T., TORAMAN B., ABİDİN İ., TUBITAK Project, Seckel sendromu ile ilişkilendirilen CCDC84'ün fonksiyonunun araştırılması, 2015 - 2018

ABİDİN İ., TUBITAK Project, Beyin Kaynaklı Nörotropik Faktör (Bdnf) Heterozigot Farenin Entorhinal Korteks Kesitlerinde Sinirsel Uyarılabilirlik Ve Sinaptik Geçiş Özelliklerinin Karakterizasyonu, 2015 - 2017

ABİDİN İ., Project Supported by Higher Education Institutions, KTÜ Tıp Fakültesi Biyofizik Anabilim Dalı Biyofizik Laboratuvarı Yama Kıskaçı (Patch-Clamp) Sisteminin Kurulması, 2011 - 2012

## Metrics

Publication: 64

Citation (WoS): 317

Citation (Scopus): 344

H-Index (WoS): 10

H-Index (Scopus): 10

## Congress and Symposium Activities

27. Ulusal Biyofizik Kongresi, Attendee, Malatya, Turkey, 2015

26. Ulusal Biyofizik Kongresi, Session Moderator, Malatya, Turkey, 2015

26. Ulusal Biyofizik Kongresi, Attendee, Amasya, Turkey, 2014

26. Ulusal Biyofizik Kongresi, Session Moderator, Amasya, Turkey, 2014

25. Ulusal Biyofizik Kongresi, Session Moderator, Trabzon, Turkey, 2013

## Scholarships

Research Stay, Other International Organizations, 2015 - Continues

IGSN doktora programı destekleme bursu, Official Institutions of Foreign Countries, 2002 - Continues

## Non Academic Experience

Otto van Guericke Üniversitesi Magdeburg

Ruhr Üniversitesi Tıp Fakültesi

University of Aberdeen