

# ÖMER FARUK KALKAN

## ASST. PROF.

Email : ofkalkan@ktu.edu.tr

Office Phone : [+90 462 377 7986](tel:+904623777986)

### International Researcher IDs

ScholarID: UMao6gYAAAAJ

ORCID: 0000-0002-7574-1183

Publons / Web Of Science ResearcherID: AAR-2157-2020

ScopusID: 55971751500

Yoksis Researcher ID: 206468



### Learning Knowledge

Undergraduate 2018 - 2022	Karadeniz Technical University, Edebiyat Fakültesi, Batı Dilleri ve Edebiyatı, Turkey
Doctorate 2014 - 2017	Karadeniz Technical University, Tip Fakültesi, Temel Tip, Turkey
Doctorate 2012 - 2014	Ruprecht-Karls-Universitaet Heidelberg, DZNE(German Center for Neurodegenerative Diseases), Clinic Neurobiology, Germany
Doctorate 2011 - 2012	Karadeniz Technical University, Tip Fakültesi, Temel Tip, Turkey
Postgraduate 2009 - 2011	Karadeniz Technical University, -, Fizyoloji, Turkey
Undergraduate 2004 - 2009	Firat University, Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, Eğitim Formasyonu (Müfredat geliştirme, Öğrenme, Eğitim, Ölçme ve Değerlendirme Yöntemleri), KTÜ Tıp Fakültesi, 2019

Health&Medicine, Konfokal mikroskopi kullanım sertifikası, KTÜ Tıp Fakültesi, 2019

Health&Medicine, Tübitak Proje Hazırlama Kursu, Necmettin Erbakan Üniversitesi, 2017

Health&Medicine, Tübitak Proje Hazırlık Kursu, Karadeniz Teknik Üniversitesi, 2014

Health&Medicine, Felasa B Education for Experts for Laboratory animal science, University of Heidelberg, 2013

Health&Medicine, Nöroglia, Yeditepe Üniversitesi, 2011

Health&Medicine, Deney Hayvanları Kullanım Sertifikası, Karadeniz Teknik Üniversitesi, 2011

## Dissertations

Doctorate, Diyabetik Nöropati ve Egzersiz: Diyabetik Nöropatik Ağrıya İrisinin Etkileri Üzerine Deneysel İnceleme,  
Karadeniz Technical University, Tıp Fakültesi, Temel Tıp Bilimleri, 2017

## Academic Titles / Tasks

---

Assistant Professor  
2018 - Continues

Karadeniz Technical University, Tıp Fakültesi, Temel Tıp

Assistant Professor  
2017 - 2018

Karadeniz Technical University, Tıp Fakültesi, Temel Tıp

Research Assistant PhD  
2012 - 2017

Karadeniz Technical University, Tıp Fakültesi, Temel Tıp

## Supported Projects

1. KALKAN Ö. F., ÖZTÜRK F., Project Supported by Higher Education Institutions, İNTRASERE BROVENTRİKÜLER NESFATİN1 ENJEKSİYONUN ERKEK SİÇANLARDA GHRELİN VE LEPTİN DÜZEYLERİNE ETKİSİ, 2022 - 2023
2. Kalkan Ö. F., Ayar A., Yıldırım M., Menteşe A., TUBITAK Project, Epilepside Ağrı Duyarlığının Genetik Absans Epilepsili Siçanlar Kullanılarak in-vivo ve in-vitro İncelenmesi, 2015 - 2018
3. AYAR A., KALKAN Ö. F., Project Supported by Higher Education Institutions, Diyabetik Nöropati ve Egzersiz Diyabetik Nöropatik Ağrıya İrisinin Etkileri Üzerine Deneysel İnceleme, 2016 - 2017
4. AYAR A., KALKAN Ö. F., TUBITAK Project, Nosiseptif periferal nöron hücre kültürü modelinde encefalin yıkımlayıcı enzim inhibitörlerinin hücre içi kalsiyum sinyalleşmesine etkileri, 2010 - 2012

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

1. **Intracerebroventricular injection of kisspeptin in male rats activates hypothalamo-pituitary-gonadal axis, but not hypothalamo-pituitary-adrenal axis.**  
Sahin Z., Aktas O., Kalkan Ö. F., Cuce G., Alver A., Şahin E., Erdem Ş., Saglam N., Gormus Z. I. S., Kutlu S.  
Journal of receptor and signal transduction research, pp.1-8, 2024 (SCI-Expanded)
2. **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)
3. **Does irisin has neuroprotective effect against diabetes induced neuropathy in male rats?**  
Kalkan Ö. F., Aktaş O., Sürməneli Y., Alver A., Özcan M., Şahin Z.  
ARCHIVES OF PHYSIOLOGY AND BIOCHEMISTRY, vol.129, no.2, pp.439-448, 2023 (SCI-Expanded)
4. **Chronic immobilization stress induces anxiety-related behaviors and affects brain essential minerals in male rats**  
Sahin Z., Ozkurkuler A., Kalkan Ö. F., Ozkaya A., Koc A., Koca R., Solak H., Gormus Z., Kutlu S.  
INTERNATIONAL JOURNAL FOR VITAMIN AND NUTRITION RESEARCH, vol.92, no.5-6, pp.349-356, 2022 (SCI-Expanded)
5. **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)
6. **Investigation of Effects of Two Chronic Stress Protocols on Depression-Like Behaviors and Brain Mineral Levels in Female Rats: an Evaluation of 7-Day Immobilization Stress.**  
Sahin Z., Ozkurculer A., Kalkan Ö. F., Ozkaya A., Koc A., Koca R. Ö., Solak H., Görmüş Z. I. S., Kutlu S.  
Biological trace element research, vol.199, pp.660-667, 2021 (SCI-Expanded)
7. **Eight-Weeks of Treadmill Exercise Ameliorates Bladder Contractile Dysfunction in Diabetic Rats**  
AYAR A., Guler V. K., Yucel B. P., KALKAN Ö. F.  
ACTA PHYSIOLOGICA, vol.225, pp.66, 2018 (SCI-Expanded)
8. **Ivabradine inhibits carbachol-induced contractions of isolated rat urinary bladder**  
Aydin H. R., Turgut H., Kurt A., Sahan R., KALKAN Ö. F., Eren H., AYAR A.  
ADVANCES IN CLINICAL AND EXPERIMENTAL MEDICINE, vol.27, no.7, pp.893-897, 2018 (SCI-Expanded)
9. **Eight-weeks of treadmill exercise ameliorates neuropathic pain in diabetic rats**  
KALKAN Ö. F., SURMENELİ Y. E., AKTAŞ O., YUCEL B. P., AYAR A.  
ACTA PHYSIOLOGICA, vol.221, pp.194-196, 2017 (SCI-Expanded)
10. **Exercise restores diabetes-mediated contractile dysfunction of isolated rat seminal vesicle**  
SURMENELİ Y. E., KURT A., KALKAN Ö. F., YUCEL B. P., KELES V., AYAR A.  
ACTA PHYSIOLOGICA, vol.221, pp.62, 2017 (SCI-Expanded)
11. **Characterization of Intracellular Calcium Responses to Membrane Depolarization in Sensory Neurons from Absence Epileptic WAG/Rij Rats**  
AYAR A., KALKAN Ö. F.  
ACTA PHYSIOLOGICA, vol.221, pp.76, 2017 (SCI-Expanded)
12. **Effects of apelin-13 in mice model of experimental pain and peripheral nociceptive signaling in rat sensory neurons**  
CANPOLAT S., ÖZCAN M., Saral S., KALKAN Ö. F., AYAR A.  
JOURNAL OF RECEPTORS AND SIGNAL TRANSDUCTION, vol.36, no.3, pp.243-247, 2016 (SCI-Expanded)
13. **Spinorphin inhibits membrane depolarization- and capsaicin-induced intracellular calcium signals in rat primary nociceptive dorsal root ganglion neurons in culture**  
AYAR A., ÖZCAN M., Kuzgun K. T., KALKAN Ö. F.  
JOURNAL OF RECEPTORS AND SIGNAL TRANSDUCTION, vol.35, no.6, pp.550-558, 2015 (SCI-Expanded)
14. **Analgesic effects of mad honey (grayanotoxin) in mice models of acute pain and painful diabetic neuropathy**  
GÜNDÜZ A., Eraydin I., Turkmen S., KALKAN Ö. F., TÜREDİ S., Eryigit U., AYAR A.  
HUMAN & EXPERIMENTAL TOXICOLOGY, vol.33, no.2, pp.130-135, 2014 (SCI-Expanded)

## Articles Published in Other Journals

1. **Circadian Rhythm, Hypothalamo-Pituitary Adrenal Axis, and Immunity: Physiological and Pathological Examples**  
Şahin Z., Kalkan Ö. F., AKTAS O., KALKAN A.  
Akdeniz Tip Dergisi, vol.9, no.3, pp.331-341, 2023 (Peer-Reviewed Journal)
2. **GLOBAL CLIMATE CHANGE AND ACCOMPANYING COVID-19 PANDEMIC: A PHYSIOLOGICAL PERSPECTIVE BY AVICENNA FROM 1000 YEARS AGO TO THE PRESENT**  
Şahin Z., Kalkan Ö. F., Aktaş O., Kalkan A.  
Türk Bilimsel Derlemeler Dergisi, vol.2, no.2, pp.79-88, 2022 (Peer-Reviewed Journal)
3. **Gülmenin fizyolojisi: Beyin lezyonlarından gülme ile ilişkili yapıları anlama**  
ŞAHİN Z., KALKAN Ö. F., AKTAŞ O.  
Sağlık ve Yaşam Bilimleri Dergisi, vol.4, no.2, pp.242-251, 2022 (Peer-Reviewed Journal)
4. **How Does the Circadian Rhythm Function in Blind People Who Have No Light Perception?**  
Şahin Z., Kalkan Ö. F., Aktaş O.  
Hipokrat Tip Dergisi, no.cilt 2-2, pp.35-43, 2022 (Peer-Reviewed Journal)

5. Gonadotropin levels reduced in seven days immobilization stress-induced depressive-like behavior in female rats.  
Sahin Z., Ozkurkuler A., Kalkan Ö. F., Bulmus F. G., Bulmus O., Kutlu S.  
Journal of basic and clinical physiology and pharmacology, vol.33, no.2, pp.199-206, 2021 (Scopus)
6. An example of a misnomer in medicine: Choice of the term basal ganglia for the basal nuclei  
ŞAHİN Z., KALKAN Ö. F., KUTLU S.  
Annals of Medical Research, vol.27, no.5, pp.1523-1527, 2020 (Peer-Reviewed Journal)
7. Comparison of the Effects of Immobilization Stress and Chronic Mild Stress Models on Depression-Related Behaviors in Female Rats: An Assessment of a 10-Day Stress Period  
Şahin Z., Koca R. Ö., Solak H., Koç A., Kalkan Ö. F., Kutlu S.  
Firat Üniversitesi Sağlık Bilimleri Tıp Dergisi, vol.33, no.3, pp.153, 2019 (Peer-Reviewed Journal)
8. Neurotoxicity evaluation of three root canal sealers on cultured rat trigeminal ganglion neurons  
ER K., AYAR A., Kalkan O., Canpolat S., TAŞDEMİR T., Ozan U.  
Journal of Clinical and Experimental Dentistry, vol.9, no.1, 2017 (Scopus)
9. Diyabetik Ayağın Fizyopatolojisinde Diyabetik Ayak Enfeksiyonları  
KALKAN Ö. F., KARAKEÇİLİ F., KALKAN A.  
Turkiye Klinikleri J Endocrin-Special Topics, vol.8, no.3, pp.18-24, 2015 (Peer-Reviewed Journal)

#### Refereed Congress / Symposium Publications in Proceedings

1. Epilepsy and Neuropathic Pain: Investigation of Pain Sensitivity in Schiatic Nerve Chronic Constriction Injury-Induced Neuropathic Pain Model in Absence Epileptic WAG/Rij Rats  
Malkoç A., Kalkan Ö. F., Yücel B. P., Saral E. N., ŞAHİN Z., AYAR A.  
Europhysiology 2018, Londra, United Kingdom, 14 - 16 September 2018, pp.309
2. Exercise restores diabetes-mediated contractile dysfunction of isolated rat seminal vesicle  
Sürmeneli Y. E., KURT A., KALKAN Ö. F., Yücel B. P., Keleş V., AYAR A.  
FEPS 2017- Joint Meeting of the Federation of European Physiological Societies and the Austrian Physiological Society with Participation of the Czech, French, Italian, Slovak, Slovenian, Swiss and Turkish Physiological Societies, Vienna, Austria, Viyana, Australia, 13 - 15 September 2017, vol.221, pp.63
3. Eight-weeks of treadmill exercise ameliorates neuropathic pain in diabetic rats  
KALKAN Ö. F., Surmeneli Y. E., AKTAŞ O., Yücel B. P., AYAR A.  
FEPS 2017 ( joint meeting of the Federation of European Physiological Societies and the Austrian Physiological Society), Viyana, Austria, 12 - 15 September 2017, vol.221, no.713, pp.194-196
4. Absans epileptik WAG/RİJ sıçanlarından izole edilen duyusal sinir hücrelerinde membran depolarizasyonuna hücre içi kalsiyum cevaplarının belirlenmesi  
AYAR A., KALKAN Ö. F.  
43. Ulusal Fizyoloji Kongresi, Denizli, Turkey, 7 - 10 September 2017, pp.86
5. Characterization of Intracellular Calcium Responses to Membrane Depolarization in Sensory Neurons from Absence Epileptic WAG/Rij Rats  
AYAR A., KALKAN Ö. F.  
Türk Fizyolojik Bilimler Derneği (TFBD) 43. Ulusal Fizyoloji Kongresi, Denizli, Turkey, 7 - 10 September 2017, vol.221, pp.76
6. INVESTIGATION OF SENSITIVITY OF OPIOID ANALGESIA IN ABSENCE EPILEPTIC WAG/RIJ RATS  
AYAR A., KALKAN Ö. F., YÜCEL B. P.  
IUPS 2017, Rio De Janeiro, Brazil, 1 - 05 September 2017, pp.64
7. Investigation of Possible Alpha Adrenergic Modification of Acute Pain Sensitivity in Absence Epileptic WAG/Rij Rats  
AYAR A., KALKAN Ö. F., KURT A., GEDİKLİ Ö., VELİOĞLU S., YILDIRIM M.  
Physiology 2016, Dublin, Ireland, 29 - 31 July 2016, pp.37
8. Neurotoxicity of various endodontic sealers on cultured rat TG neurons

Er K., AYAR A., KALKAN Ö. F., Canpolat S., TAŞDEMİR T., Ozan Ü.  
7th International Association for Dental Research/Pan European Regional Congress, Dubrovnik, Croatia, 10 - 13 September 2014, pp.1

9. **Physiological Performance Profiles Of Turkish Olimpic Water Canoe Team**  
AYAN V., BEKTAŞ F., KALKAN Ö., CANPOLAT S., AYAR A.  
The Physiological Society, Edinburgh, United Kingdom, 10 - 14 October 2012, pp.170
10. **Physiological performance profiles of Turkish Olympic water canoe team**  
AYAN V., BEKTAŞ F., KALKAN Ö. F., CANPOLAT S., AYAR A.  
Physiology 2012, Edinburgh, United Kingdom, 2 - 05 July 2012, pp.27
11. **Enkephalinase inhibitors attenuates adenosine triphosphate-induced increase of intracellular calcium in cultured rat dorsal root ganglion neurons**  
AYAR A., ÖZCAN M., KALKAN Ö. F.  
Physiology 2012, Edinburgh, United Kingdom, 2 - 05 July 2012, pp.27
12. **Melatoninin kapsaisinle uyarılmış hücre içi kalsiyum sinyalleri üzerine etkisinin kültüre sıçan dorsal kök gangliyon sinir hücrelerinde incelenmesi**  
ÖZCAN M., KALKAN Ö. F., AYAR A.  
10. Ulusal Sinir Bilim Kongresi, İstanbul, Turkey, 9 - 12 April 2012, pp.106
13. **The Endogenous Salivary Peptide Opiorphin Inhibits Ca<sup>2+</sup> Signalling in Rat Primary Sensory Neurones**  
AYAR A., ÖZCAN M., KALKAN Ö. F.  
Physiology 2011, Oxford, United Kingdom, 11 - 14 July 2011, pp.23
14. **Melatonin Inhibits Membrane Depolarisation-Induced Calcium Signals in Cultured Rat Trigeminal Ganglion Neurons**  
KALKAN Ö. F., KAÇAR E., ÖZCAN M., AYAR A.  
Physiology 2011, Oxford, United Kingdom, 11 - 14 July 2011, pp.23
15. **Effects of levosimendan on diabetes-induced neuropathic pain in a mice model**  
KALKAN Ö. F., AYAR A.  
Turkish FEPS Physiology meeting 2011, İstanbul, Turkey, 3 - 07 July 2011, pp.46
16. **Apelin-13'ün periferal nosiseptif sinyalleşme üzerine etkilerinin izole sıçan duysal sinir hücrelerinde incelenmesi**  
ÖZCAN M., KALKAN Ö. F., KUTLU S., AYAR A.  
10. Ulusal Sinir Bilim Kongresi, İstanbul, Turkey, 9 - 12 April 2011, pp.102

#### Academic and Administrative Experience

2022 - Continues	<b>Ölçme Değerlendirme Kurulu Başkanı</b>	Karadeniz Technical University, Tip Fakültesi
2021 - Continues	<b>Deputy Director of the Center</b>	Karadeniz Technical University, Tip Fakültesi
2021 - Continues	<b>Erasmus Program Institutional Coordinator</b>	Karadeniz Technical University, Tip Fakültesi
2019 - Continues	<b>Ölçme Değerlendirme Kurulu Üyesi</b>	Karadeniz Technical University, Tip Fakültesi

#### Courses

Merkezi Sinir Sistemi (Nörolojik Bilimler) , Undergraduate, 2021 - 2022, 2020 - 2021  
Merkezi Sinir Sistemi, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Renal Fizyoloji, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Periferik Sinir Sistemi, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Fizyoloji, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Dolaşım Fizyolojisi, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Renal Fizyoloji, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019  
İleri Sinir Fizyolojisi - I, Doctorate, 2019 - 2020, 2018 - 2019  
Boşaltım Fizyolojisi , Doctorate, 2019 - 2020

## Memberships / Tasks in Scientific Organizations

Türk Fizyolojik Bilimler Derneği, Member, 2017 - Continues

## Scientific Refereeing

DRUG AND CHEMICAL TOXICOLOGY, SCI Journal, January 2022

Annals of Medical Research, National Scientific Refreed Journal, September 2021

Project Supported by Higher Education Institutions, BAP Research Project, Karadeniz Technical University, Turkey, September 2021

HUMAN & EXPERIMENTAL TOXICOLOGY, Journal Indexed in SCI-E, April 2021

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Sivas Cumhuriyet University, Turkey, March 2021

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Alanya Alaaddin Keykubat University, Turkey, March 2021

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, İstanbul Medipol University, Turkey, March 2021

INTERNATIONAL JOURNAL OF NEUROSCIENCE, SCI Journal, November 2020

## Metrics

Publication: 39

Citation (WoS): 39

Citation (Scopus): 50

H-Index (WoS): 3

H-Index (Scopus): 4

## Research Areas

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

## Non Academic Experience

Karadeniz Teknik Üniversitesi

Ruprecht-Karls-Universität Heidelberg