

## Asst. Prof. SİMGE ÜNAY

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AHB-1271-2022

ScopusID: 57212115669

### Education Information

Doctorate, Aydın Adnan Menderes University, Sağlık Bilimleri Enstitüsü, Turkey 2018 - 2022

Postgraduate, Aydın Adnan Menderes University, Sağlık Bilimleri Enstitüsü, Turkey 2015 - 2018

Undergraduate, Baskent University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, Turkey 2010 - 2015

### Dissertations

Doctorate, Sisplatin ile indüklenmiş in vitro periferik nöropati modelinde kuersetin ve düşük seviyeli lazer tedavisinin etkilerinin incelenmesi, Aydın Adnan Menderes University, Sağlık Bilimleri Enstitüsü, 2022

Postgraduate, Kolon ve mide kanserinde 5-aminolevünelik asit aracılı fotodinamik tanı, Aydın Adnan Menderes University, Sağlık Bilimleri Enstitüsü, 2018

### Research Areas

Biophysics

### Academic Titles / Tasks

Assistant Professor, Usak University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2024 - Continues

Assistant Professor, Lokman Hekim University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2022 - 2024

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

- N-methyl-D-aspartate receptors and thymoquinone induce apoptosis and alteration in mitochondria in colorectal cancer cells**  
Sirinyildiz F., ÜNAY S.  
Medical Oncology, vol.41, no.5, 2024 (SCI-Expanded)
- An increase in intercellular crosstalk and electrotonic coupling between cardiomyocytes and nonmyocytes reshapes the electrical conduction in the metabolic heart characterized by short QT intervals in ECGs**  
BİLLUR D., OLĞAR Y., DURAK A., Yozgat A. H., ÜNAY S., TUNCAY E., TURAN B.  
Cell Biochemistry and Function, vol.41, no.8, pp.1526-1542, 2023 (SCI-Expanded)

- III. **Investigation of effects of quercetin and low-level laser therapy in cisplatin-induced in vitro peripheral neuropathy model**  
ÜNAY S., Bilgin M. D.  
Lasers in Medical Science, vol.38, no.1, 2023 (SCI-Expanded)
- IV. **Mathematical morphology-based imaging of gastrointestinal cancer cell motility and 5-aminolevulinic acid-induced fluorescence**  
Ramonaite R., Petrolis R., ÜNAY S., Kiudelis G., Skieceviciene J., Kupcinskas L., Bilgin M. D., Krisciukaitis A.  
Biomedizinische Technik, vol.64, no.6, pp.711-720, 2019 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Chemotherapy-induced peripheral neuropathy in the neuronal cells model**  
ÜNAY S.  
CUKUROVA MEDICAL JOURNAL, vol.49, no.3, 2024 (ESCI)
- II. **Magnolia Bark Ekstraktı Uygulamasının Yaşlı Fare Kalp Fonksiyon Yetersizliğindeki İyileştirici Etkileri**  
ÜNAY S., Aktay İ., TURAN B.  
Kocatepe Tıp Dergisi, vol.25, no.2, pp.227-233, 2024 (Peer-Reviewed Journal)
- III. **Morphometric and Fluorescence Analysis of Nerve Growth Factor-Differentiated Pc12 Cells**  
ÜNAY S., ŞİRİNYILDIZ F.  
Süleyman Demirel Üniversitesi Tıp Fakültesi Dergisi, vol.30, no.4, 2023 (Peer-Reviewed Journal)
- IV. **Tumor Florescence Imaging Method Using 5-ALA in Ht-29 Cells**  
ÜNAY S., BİLGİN M. D.  
Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi, vol.7, no.3, pp.640-650, 2023 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Uzayda İnsan: Mikrogravitenin Hücre Üzerine Etkileri**  
Şirinyıldız F., Ünay S.  
in: Biyofizik ve Fizyoloji Alanında Akademik Analizler, Birnur Akkaya, Editor, Yaz Yayınları, Ankara, pp.1-10, 2024
- II. **Uzayda İnsan: Mikrogravitenin Sinir Sistemi Üzerine Etkileri**  
ÜNAY S., ŞİRİNYILDIZ F.  
in: Biyofizik ve Fizyoloji Alanında Akademik Analizler, Birnur Akkaya, Editor, Yaz Yayınları, Ankara, pp.1-10, 2024
- III. **Timokinonun Gastrointestinal Kanserler Üzerine Olumlu Etkileri**  
ÜNAY S., ŞİRİNYILDIZ F.  
in: Sağlık Bilimleri Alanında Uluslararası Araştırmalar, Doç. Dr. Dilek ATİK, Editor, Platanus Publishing, pp.740-749, 2023

## Refereed Congress / Symposium Publications in Proceedings

- I. **Antioksidanların yaşlanmada bilişsel işlevler üzerindeki rolü**  
ÜNAY S., ŞİRİNYILDIZ F.  
4TH INTERNATIONAL CONFERENCE ON INNOVATIVE ACADEMIC STUDIES (ICIAS 2024), Konya, Turkey, 12 - 13 March 2024
- II. **Relationship between HMGB1 and chemotherapy-induced peripheral neuropathy**  
ÜNAY S.  
1st International Congress on Solutions in Science (INSCORE), İzmir, Turkey, 11 - 13 September 2023

- III. **The Potential Effects Of Allum Ursinum On Cancer**  
ÜNAY S., ŞİRİNYILDIZ F.  
2nd International Eurasian Health Sciences Congress, Trabzon, Turkey, 15 - 16 June 2023
- IV. **A review on the analysis of six different experimental anemia models**  
ŞİRİNYILDIZ F., İŞLER CEYHAN D., ÜNAY S.  
XL Congress of the Spanish Society of Physiological Sciences (SECF), 19 - 22 September 2022
- V. **5- Aminolevulinic Acid-Mediated Photodynamic Diagnosis In Colon Cancer**  
ÜNAY S., BİLGİN M. D.  
The 5th Photodynamic Day In the framework of the International Day of Light 2021, 18 May 2021
- VI. **Mide ve Kolon Kanseri Hücre Dizinlerinde 5-Aminolevulinik Asit ile Uyarılmış Fotodinamik Tanı**  
ÜNAY S., BİLGİN M. D., KRİSCİUKAITIS A., RAMONAİTEA R., PETROLIS R.  
28.-29. Ulusal Biyofizik Kongresi, İstanbul, Turkey, 06 September 2018
- VII. **5-Aminolevulinic Acid-Mediated Fluorescence In Colon Cancer Cell Line**  
ÜNAY S., BİLGİN M. D., KRİSCİUKAITIS A., RAMONAİTEA R., PETROLIS R.  
Virtual Instruments in Biomedicine, Lithuania, 19 May 2017

## Supported Projects

- Ünay S., Turan B., Tuncay E., TÜBİTAK Project, Fizyolojik Yaşlanmaya Veya Kemoterapi Tedavisine Bağlı Gelişen Periferik Nöropatilerin Moleküler Mekanizmasının Nöronal Hücrelerde İncelenmesi, 2023 - 2024
- Ünay S., Bilgin M. D., TÜBİTAK Project, Sisplatin ile İndüklenmiş in Vitro Periferik Nöropatide Kuersetin ve Düşük Seviyeli Lazer Tedavisinin Etkilerinin İncelenmesi, 2021 - 2022
- Ünay S., Bilgin M. D., Project Supported by Higher Education Institutions, Kolon ve Mide Kanserinde 5-Aminolevünelik Asit ile Aracılı Foto Dinamik Tanı, 2017 - 2018

## Memberships / Tasks in Scientific Organizations

Türk Biyofizik Derneği, Member, 2022 - Continues, Turkey

## Scientific Refreeing

- Dokuz Eylül Üniversitesi Tıp Fakültesi Dergisi, National Scientific Refreed Journal, October 2024
- TOXICOLOGY MECHANISMS AND METHODS, Journal Indexed in SCI-E, July 2024
- R&D Project of Group B, Usak University, Turkey, July 2024
- Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi, National Scientific Refreed Journal, April 2024
- Kocatepe Tıp Dergisi, National Scientific Refreed Journal, January 2024
- Medical records-international medical journal (Online), National Scientific Refreed Journal, December 2023
- Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi, National Scientific Refreed Journal, December 2023
- Medical records-international medical journal (Online), National Scientific Refreed Journal, November 2023
- DUZCE MEDICAL JOURNAL = DÜZCE TIP FAKÜLTESİ DERGİSİ, National Scientific Refreed Journal, July 2023
- Ondokuz Mayıs Üniversitesi Tıp Dergisi (. Journal of Experimental and Clinical Medicine), National Scientific Refreed Journal, June 2023
- black sea journal of health science, National Scientific Refreed Journal, February 2023
- JOURNAL OF CONTEMPORARY MEDICINE, National Scientific Refreed Journal, February 2023
- journal of medical innovation and technology, National Scientific Refreed Journal, February 2023

## Tasks In Event Organizations

Ünay S., 2nd International Congress on Solutions in Science (INSCORE), Scientific Congress, Turkey, Kasım 2024

Ünay S., 1st INTERNATIONAL CONGRESS ON SOLUTIONS IN SCIENCE, Scientific Congress, Turkey, Eylül 2023

## Metrics

Publication: 18

Citation (Scopus): 4

H-Index (Scopus): 1

## Congress and Symposium Activities

4TH INTERNATIONAL CONFERENCE ON INNOVATIVE ACADEMIC STUDIES (ICIAS 2024), Attendee, Konya, Turkey, 2024

1st International Congress on Solutions in Science (INSCORE), Session Moderator, İzmir, Turkey, 2023

1st International Congress on Solutions in Science (INSCORE), Attendee, İzmir, Turkey, 2023

2nd International Eurasian Health Sciences Congress (IEHSC2023), Attendee, Trabzon, Turkey, 2023

XL Congress of the Spanish Society of Physiological Sciences (SECF), Attendee, Badajoz, Spain, 2022

The 5th Photodynamic Day In the framework of the International Day of Light 2021, Attendee, İstanbul, Turkey, 2021

28.-29. Ulusal Biyofizik Kongresi, Attendee, İstanbul, Turkey, 2018

Virtual Instruments in Biomedicine, Attendee, Klaipeda, Lithuania, 2017

## Invited Talks

Erasmus+BIP course BIO: Physics, Statistics and Informatics, Workshop, Lithuanian University of Healthy Sciences, Lithuania, August 2024

## Scholarships

2224-A Yurt Dışı Bilimsel Etkinliklere Katılımı Destekleme Programı, TÜBİTAK, 2022 - 2022

Yök 100/2000 doktora bursu, YÖK, 2018 - 2022