

## Asst. Prof. Muzafer ARIKAN

### Personal Information

**Email:** muzafferarikan@medipol.edu.tr

**Web:** <https://avesis.medipol.edu.tr/muzafferarikan>

### International Researcher IDs

ScholarID: H6tS-esAAAAJ

ORCID: 0000-0001-5162-2000

Publons / Web Of Science ResearcherID: HRD-7220-2023

ScopusID: 55314066300

Yoksis Researcher ID: 365472

### Biography

Muzaffer Arıkan's academic background includes a BSc in Molecular Biology and Genetics from Istanbul Technical University, a MSc in Genetics from the Aziz Sancar Institute for Experimental Medical Research and a PhD in Molecular Biology and Genetics from Istanbul University.

Dr. Arıkan is currently holding a faculty position in the Department of Medical Biology in the School of Medicine. His research focuses on understanding structure and function of microbial communities through multi-omics analyses.

### Education Information

Doctorate, Istanbul University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik (Dr), Turkey 2013 - 2018

Postgraduate, Istanbul University, Sağlık Bilimleri Enstitüsü, Genetik (YI) (Tezli), Turkey 2010 - 2012

Undergraduate, Istanbul Technical University, Fen-Edebiyat Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, Turkey 2005 - 2010

### Foreign Languages

English, C2 Mastery

### Dissertations

Doctorate, Kombucha'daki (çay mantarı) mikrobiyal kompozisyonun biyoinformatik analizi, Istanbul University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik (Dr), 2018

Postgraduate, Hücre soylarını oluşturmada kullanılan plazmid profilinin belirlenmesi, Istanbul University, Sağlık Bilimleri Enstitüsü, Genetik (YI) (Tezli), 2012

### Research Areas

Bioinformatics, Microbiology, Molecular Biology and Genetics

## Academic Titles / Tasks

Assistant Professor, Istanbul Medipol University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2022 - Continues

## Courses

Genomik ve Proteomik, Postgraduate, 2022 - 2023  
Modern Biology, Undergraduate, 2022 - 2023  
Tıbbi Biyoloji ve Genetikte Güncel Konular, Doctorate, 2022 - 2023  
Microbiology, Undergraduate, 2022 - 2023  
Medical Biology and Genetics, Undergraduate, 2022 - 2023  
Medical Biology and Genetics, Undergraduate, 2022 - 2023  
Medical Biology, Postgraduate, 2022 - 2023  
Medical Microbiology, Undergraduate, 2021 - 2022

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

- I. **Investigation of the Relationship Between Akkermansia Genomic Diversity in Gut Microbiota and Parkinson's Disease Dementia Parkinson Hastalığı Demansı ile Bağırsak Mikrobiyotasındaki Akkermansia Genomik Çeşitliliği Arasındaki İlişkinin İncelenmesi**  
ARIKAN M., Kahraman Demir T., Yıldız Z., HELVACI YILMAZ N., Şen A., HANOĞLU L., YILDIRIM S.  
Mikrobiyoloji bulteni, vol.58, no.1, pp.13-28, 2024 (SCI-Expanded)
- II. **Metaproteogenomic analysis of saliva samples from Parkinson's disease patients with cognitive impairment**  
ARIKAN M., Demir T. K., Yıldız Z., NALBANTOĞLU Ö. U., Korkmaz N. D., YILMAZ N. C., Şen A., Özcan M., Muth T., HANOĞLU L., et al.  
npj Biofilms and Microbiomes, vol.9, no.1, 2023 (SCI-Expanded)
- III. **Integrated multi-omics analyses of microbial communities: a review of the current state and future directions**  
Arikan M., Muth T.  
Molecular Omics, vol.20, pp.1-17, 2023 (SCI-Expanded)
- IV. **Comparison of S gene mutations in patients with occult and chronic hepatitis B virus infection**  
Cakal B., Cavus B., Atasoy A., Altunok D., PODA M., Bulakcı M., Gulluoglu M., Demirci M., Sener L. T., Arslan A. B., et al.  
Virus Research, vol.318, 2022 (SCI-Expanded)
- V. **Axillary Microbiota Is Associated with Cognitive Impairment in Parkinson's Disease Patients**  
ARIKAN M., Yildiz Z., Demir T. K., YILMAZ N. C., Sen A., HANOĞLU L., YILDIRIM S.  
Microbiology Spectrum, vol.10, no.1, 2022 (SCI-Expanded)
- VI. **Stratification of the Gut Microbiota Composition Landscape across the Alzheimer's Disease Continuum in a Turkish Cohort**  
YILDIRIM S., NALBANTOĞLU Ö. U., Bayraktar A., Ercan F. B., GÜNDOĞDU A., Velioglu I. A., Göl M. F., Soylu A. E., Koç F., Gülpınar E. A., et al.  
mSystems, vol.7, no.1, 2022 (SCI-Expanded)
- VII. **Microbial composition of Kombucha determined using amplicon sequencing and shotgun metagenomics**  
ARIKAN M., Mitchell A. L., Finn R. D., Gürel F.  
Journal of Food Science, vol.85, no.2, pp.455-464, 2020 (SCI-Expanded)
- VIII. **Spleen tyrosine kinase inhibitor TAK-659 prevents splenomegaly and tumor development in a murine model of epstein-barr virus-associated lymphoma**  
Cen O., Kannan K., Sappal J. H., Yu J., Zhang M., ARIKAN M., Ucur A., Ustek D., Cen Y., Gordon L., et al.  
mSphere, vol.3, no.4, 2018 (SCI-Expanded)
- IX. **Genomic analysis reveals the biotechnological and industrial potential of levan producing halophilic**

### **extremophile, Halomonas smyrnensis AAD6T**

Diken E., Ozer T., Arıkan M., EMRENCE Z., Oner E. T., Ustek D., ARGA K. Y.

SpringerPlus, vol.4, no.1, 2015 (SCI-Expanded)

- X. **Water as source of Francisella tularensis infection in humans, Turkey**  
Kilic S., Birdsell D. N., Karagöz A., Çelebi B., Bakkaloglu Z., ARIKAN M., Sahl J. W., Mitchell C., Rivera A., Maltinsky S., et al.  
Emerging Infectious Diseases, vol.21, no.12, pp.2213-2216, 2015 (SCI-Expanded)
- XI. **Mitochondrial mutations in patients with congenital heart defects by next generation sequencing technology**  
ABACI N., ARIKAN M., Tansel T., Sahin N., ÇAKİRİS A., PAÇAL F., SIRMA EKMEKÇİ S., Gök E., Üstek D.  
Cardiology in the Young, vol.25, no.4, pp.705-711, 2015 (SCI-Expanded)
- XII. **Mitochondrial DNA profiling via genomic analysis in mesial temporal lobe epilepsy patients with hippocampal sclerosis**  
Gurses C., Azakli H., Alptekin A., ÇAKİRİS A., ABACI N., ARIKAN M., Kursun O., Gokyigit A., Ustek D.  
Gene, vol.538, no.2, pp.323-327, 2014 (SCI-Expanded)
- XIII. **Role of the line probe assay INNO-LiPA HBV DR and ultradeep pyrosequencing in detecting resistance mutations to nucleoside/nucleotide analogues in viral samples isolated from chronic hepatitis B patients**  
MEŞE S., ARIKAN M., ÇAKİRİS A., ABACI N., Gumus E., Kursun O., ÖNEL D., Ustek D., KAYMAKOĞLU S., Badur S., et al.  
Journal of General Virology, vol.94, no.PART 12, pp.2729-2738, 2013 (SCI-Expanded)
- XIV. **Whole mitochondrial DNA variations in hippocampal surgical specimens and blood samples with high-throughput sequencing: A case of mesial temporal lobe epilepsy with hippocampal sclerosis**  
Azakli H., Gurses C., ARIKAN M., Aydoseli A., Aras Y., Sencer A., Gokyigit A., Bilgic B., Ustek D.  
Gene, vol.529, no.1, pp.190-194, 2013 (SCI-Expanded)
- XV. **Whole mitochondrial genome analysis of a family with NARP/MILS caused by m.8993T>C mutation in the MT-ATP6 gene**  
KARA B., ARIKAN M., Maraş H., ABACI N., ÇAKİRİS A., Üstek D.  
Molecular Genetics and Metabolism, vol.107, no.3, pp.389-393, 2012 (SCI-Expanded)
- XVI. **Draft genome sequence of Halomonas smyrnensis AAD6T.**  
Söğütçü E., Emrence Z., Arıkan M., Çakiris A., Abacı N., Toksoy Öner E., Üstek D., Arga K. Y.  
JOURNAL OF BACTERIOLOGY, vol.194, no.20, pp.5690-5691, 2012 (SCI-Expanded)
- XVII. **A genome-wide analysis of lentivector integration sites using targeted sequence capture and next generation sequencing technology**  
Ustek D., Sirma S., Gumus E., ARIKAN M., ÇAKİRİS A., ABACI N., Mathew J., EMRENCE Z., Azakli H., Cosan F., et al.  
Infection, Genetics and Evolution, vol.12, no.7, pp.1349-1354, 2012 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **An in silico Investigation of Anticancer Peptide Candidates in Fermented Food Microbiomes**  
Arıkan M.  
Experimed, vol.13, no.1, pp.64-72, 2023 (Scopus)
- II. **ASSOCIATION OF HLA-DQ POLYMORPHISMS WITH HEPATITIS B VIRUS INFECTION IN TURKISH POPULATION**  
ÇAKAL B., Arıkan M., ATASOY A., ÇAVUŞ B., PODA M., BULAKÇI M., GÜLLÜOĞLU M., Demirci M., AKYÜZ F.  
Sabıad , vol.5, no.3, pp.186-192, 2022 (Peer-Reviewed Journal)
- III. **Gene level interactions of four commonly used herbal products-a systematic literature**  
ARIKAN M., ARI Ş.  
Journal of Biological Sciences, vol.18, no.6, pp.307-316, 2018 (Scopus)

## Books & Book Chapters

### I. Next-generation sequencing: advantages, disadvantages, and future

Arı Ş., Arıkan M.

in: Plant omics: Trends and applications, K.R. Hakeem,H. Tombuloglu,G. Tombuloglu, Editor, Springer, London/Berlin , Zürich, pp.109-136, 2016

## Refereed Congress / Symposium Publications in Proceedings

### I. Parkinson Hastalarında Bilişsel Bozukluk ve Aksiller Mikrobiyota İlişkisi

ARIKAN M., YILDIRIM S.

19. Ulusal Sinirbilim Kongresi, Turkey, 23 November 2021

## Supported Projects

ARIKAN M., Parkinson Hastalığı Demansı ile Akkermansia Arasındaki İlişkinin Suş Düzeyinde Metagenomik Analizler ve Cins Spesifik Yeni Nesil Dizileme Yaklaşımıyla İncelenmesi, 2021 - 2021

ARIKAN M., Sulfolobus solfataricus P2 Biyodesülfürizasyon Aktivitesinin Transkriptomik Analizi, 2017 - 2018

ARIKAN M., Project Supported by Higher Education Institutions, Kombucha'daki (Çay Mantarı) Mikrobiyal Kompozisyonun Biyoinformatik Analizi, 2016 - 2018

ARIKAN M., Kesin Fungus Tür Tayini İçin Multilokus Dizi Analizi (Mlsa) Tabanlı Bir Yöntem Geliştirilmesi, 2015 - 2018

ARIKAN M., Ekinezya Ürünlerine Hile Amaçlı Karıştırılan Parthenium Integrifolium'un Tespiti İçin Bir Yöntem Geliştirilmesi, 2016 - 2017

İSTANBULLU TOSUN A., YILMAZ M., ARIKAN M., Hastane Enfeksiyonu Etkenlerinin Hızlı Tespiti için Otomatize Moleküler Analiz Cihaz ve Kitlerinin Geliştirilmesi, 2015 - 2017

ARIKAN M., Staphylococcus Cinsine Ait Bakterilerde Hızlı Tür Tayini İçin Bir Yöntem Geliştirilmesi, 2015 - 2016

ARIKAN M., Gıda Patojenlerinin Tespitine Yönelik Döngü Aracılı İzotermal Amplifikasyon (LAMP) Tabanlı Kitler Geliştirilmesi, 2015 - 2016

## Memberships / Tasks in Scientific Organizations

International Society for Computational Biology (ISCB), Member, 2023 - Continues, England

Turkish Microbiology Society, Member, 2018 - Continues, Turkey

Federation of European Microbiological Societies (FEMS), Member, 2018 - Continues, Germany

## Scientific Refereeing

MSYSTEMS, Journal Indexed in SSCI, November 2022

ENVIRONMENTAL MICROBIOLOGY, Journal Indexed in SSCI, September 2020

## Scholarships

Lindau Nobel Laureate Meeting Grant, Other International Organizations, 2023 - 2023

EMBO Travel Grant, Other International Organizations, 2022 - 2022

FEMS Research and Training Grant, Other International Organizations, 2021 - 2021

TÜBİTAK BİDEB-2214/A, TUBİTAK, 2017 - 2018

TÜBİTAK BİDEB-2211, TUBİTAK, 2012 - 2017

Horizon 2020 Travel Grant, Other International Organizations, 2016 - 2016

TÜBİTAK BİDEB-2210, TUBİTAK, 2010 - 2012

TÜBİTAK BİDEB-2205, TUBİTAK, 2005 - 2010

## **Awards**

Arikan M., Tanner Award, Institute Of Food Technologists, June 2023