

Asst. Prof. MUHAMMED ERKAN KARABEKMEZ

Personal Information

Office Phone: [+90 216 280 3333](tel:+902162803333) Extension: 4052

Email: erkan.karabekmez@medeniyet.edu.tr

Web: <https://avesis.medeniyet.edu.tr/erkan.karabekmez>

International Researcher IDs

ScholarID: b3NAkWEAAAAJ&hl=tr&oi=ao

ORCID: 0000-0002-0517-5227

Publons / Web Of Science ResearcherID: AAI-2436-2019

ScopusID: 51565597100

Education Information

Doctorate, Bogazici University, Institute Of Science, Kimya Mühendisliği Bölümü, Turkey 2010 - 2016

Postgraduate, Bogazici University, Institute Of Science, Kimya Mühendisliği Bölümü, Turkey 2004 - 2010

Undergraduate, Bogazici University, Faculty Of Engineering, Department Of Chemistry Engineering, Turkey 1998 - 2004

Dissertations

Doctorate, Network Topology and Dynamic Data Analysis in *Saccharomyces cerevisiae*, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, 2016

Postgraduate, Comparative analysis of teafs and NP analysis to integrate interactome and transcriptome data to reveal response to C-pulse in *Saccharomyces cerevisiae*, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, 2010

Research Areas

Life Sciences, Bioinformatics, Biological Information, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Istanbul Medeniyet University, Faculty Of Engineering And Natural Sciences , Bioengineering , 2017 - Continues

Research Assistant, Bogazici University, Faculty Of Engineering, Department Of Chemistry Engineering, 2010 - 2016

Courses

Akademik Sunum Becerileri, Undergraduate, 2018 - 2019

Mühendislik Tablo Uygulamaları, Postgraduate, 2018 - 2019

Mühendislik Tablo Uygulamaları, Postgraduate, 2018 - 2019

Bioinformatics, Undergraduate, 2019 - 2020

Bioinformatik 1, Postgraduate, 2018 - 2019, 2019 - 2020

Metabolik Mühendislik, Postgraduate, 2018 - 2019

Biyoinformatik 1, Postgraduate, 2019 - 2020
Organik Kimya, Undergraduate, 2019 - 2020
Organik Kimya, Undergraduate, 2017 - 2018, 2018 - 2019
Protein Mühendisliği, Doctorate, 2017 - 2018
Organic Chemistry for Biologists, Undergraduate, 2017 - 2018
Biyoinformatiğe Giriş, Undergraduate, 2016 - 2017
Bilimsel Araştırma Yöntemleri, Postgraduate, 2017 - 2018

Jury Memberships

Doctoral Examination, Doctoral Examination, Marmara Üniversitesi, October, 2019
Doctoral Examination, Doctoral Examination, Marmara Üniversitesi, October, 2019
Post Graduate, Post Graduate, Marmara Üniversitesi, August, 2018
Doctoral Examination, Doctoral Examination, Marmara Üniversitesi, March, 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Time-dependent re-organization of biological processes by the analysis of the dynamic transcriptional response of yeast cells to doxorubicin**
KARABEKMEZ M. E. , Taymaz-Nikerel H., Eraslan S., KIRDAR B.
MOLECULAR OMICS, vol.17, pp.572-582, 2021 (Peer-Reviewed Journal)
- II. **Integrative genome-wide analysis of long-term effects of doxorubicin on yeast cells**
Taymaz-Nikerel H., Karabekmez E., Eraslan S., Kirdar B.
NEW BIOTECHNOLOGY, vol.44, 2018 (Peer-Reviewed Journal)
- III. **Doxorubicin induces an extensive transcriptional and metabolic rewiring in yeast cells**
Taymaz-Nikerel H., Karabekmez M. E. , Eraslan S., Kirdar B.
SCIENTIFIC REPORTS, vol.8, 2018 (Peer-Reviewed Journal)
- IV. **A novel topological centrality measure capturing biologically important proteins**
Karabekmez M. E. , Kirdar B.
MOLECULAR BIOSYSTEMS, vol.12, no.2, pp.666-673, 2016 (Peer-Reviewed Journal)
- V. **A Novel Strategy for Selection and Validation of Reference Genes in Dynamic Multidimensional Experimental Design in Yeast**
Cankorur-Cetinkaya A., Dereli E., Eraslan S., Karabekmez E., Dikicioglu D., Kirdar B.
PLOS ONE, vol.7, no.6, 2012 (Peer-Reviewed Journal)
- VI. **How yeast re-programmes its transcriptional profile in response to different nutrient impulses**
Dikicioglu D., Karabekmez E., Rash B., Pir P., Kirdar B., Oliver S. G.
BMC SYSTEMS BIOLOGY, vol.5, 2011 (Peer-Reviewed Journal)

Articles Published in Other Journals

- I. **Data Ethics in Digital Health and Genomics**
KARABEKMEZ M. E.
NEW BIOETHICS-A MULTIDISCIPLINARY JOURNAL OF BIOTECHNOLOGY AND THE BODY, 2021 (Peer-Reviewed Journal)
- II. **A modified Soft-thresholding Approach in the Transcriptomic Analysis of Adaptation of E.coli to Alternating Substrate Conditions**
Karabekmez M. E.
Hittite Journal of Science and Engineering, vol.6, no.4, pp.315-318, 2019 (Peer-Reviewed Journal)

- III. **Lumping Protein Complexes to Reduce the Complexity of Human Protein-Protein Interaction Network**
Karabekmez M. E.
Anadolu Kliniği Tıp Bilimleri Dergisi, vol.24, no.3, pp.231-236, 2019 (Peer-Reviewed Journal)
- IV. **Yaşam Bilimlerinde Yeni Paradigma**
Karabekmez M. E.
Hayat Sağlık, no.18, pp.12-15, 2018 (Non Peer-Reviewed Journal)

Books & Book Chapters

- I. **Covid-19 Salgınında Veri Bilimini Yeniden Düşünmek**
Karabekmez M. E.
in: Salgın Günlerinde Toplum ve Siyaseti Yeniden Düşünmek, Abdulkadir Macit, Editor, İlem Yayınları, İstanbul, pp.107-120, 2020
- II. **Yaşam Bilimlerinde Veri-Yoğun Çağ: Yeni Nesil Dizileme**
Karabekmez M. E.
in: Sağlık Alanında Büyük Veri, Hakan Ertin, Tuncay Sandıkçı, Editor, İsar Yayınları, İstanbul, pp.11-23, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **Genetic Code, Bioinformatics and Biosecurity**
Karabekmez M. E.
9. Uluslararası Lif ve Polimer Araştırmaları Sempozyumu, Eskişehir, Turkey, 18 June 2021, pp.42
- II. **Mathematical Modeling of Microbiota**
Karabekmez M. E.
BİOTÜRKİYE, İstanbul, Turkey, 05 March 2020, pp.1
- III. **Yapay Zeka ve Kişiyeye Özel Moleküler Tıp**
Karabekmez M. E.
Uluslararası Sağlıkta Yapay Zeka Kongresi, İzmir, Turkey, 16 January 2020
- IV. **Adaptation of E.coli and Alternating Substrate Conditions**
Karabekmez M. E.
2nd International Conference on Life and Engineering Sciences, İstanbul, Turkey, 27 - 29 June 2019, pp.1
- V. **An Attempt to Construct Context Specific Protein-protein Interaction Network of Yeast**
Karabekmez M. E.
2nd International Conference on Life and Engineering Science, İstanbul, Turkey, 27 - 29 June 2019, pp.1
- VI. **Integrated Multi-organism Genome Scale Metabolic Modeling of Microbial Community of P.aeruginosa and M.barkeri**
Karabekmez M. E.
ECOMB 2019: Eurasian Congress on Molecular Biotechnology, Trabzon, Turkey, 19 - 21 September 2019, pp.163-171
- VII. **A Novel Thresholding Procedure for Assessing Scale-Free Gene Co-Expression Networks**
KARABEKMEZ M. E.
International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), Ankara, Turkey, 26 April 2018, pp.45
- VIII. **An integrative approach to analyze dynamic transcriptional response of yeast cells to DNA damage**
KARABEKMEZ M. E.
FEBS Congress, Aydın, Turkey, 03 September 2016, pp.14-15
- IX. **Dynamic response to DNA damage in S. cerevisiae**
Karabekmez M. E. , Kirdar B.

Supported Projects

Demircan B., Ankaralı H., Kır G., Alimoğlu O., Yücel B., İkişik H., Karabekmez M. E. , Turkey Institutes of Health Administration Project, İntegratif Bioinformatik Analizler Aracılığı ile Meme Kanserinde Yeni Epigenetik Biyobelirteçlerin Tanımlanması, 2020 - 2022

Karabekmez M. E. , Asram Sağıroğlu A., Turkey Institutes of Health Administration Project, ANKİLOZAN SPONDİLİT VERİLERİNİN MULTİ-OMİK YAKLAŞIMLA İNCELENMESİ, 2020 - 2021

KARABEKMEZ M. E. , Project Supported by Higher Education Institutions, ASİMETRİK SİGMOİD FONKSİYONUN AĞIRLIKLILIK GEN EŞ ANLATIM AĞ ANALİZİ METODUNDA KULLANILMASI, 2018 - 2019

Memberships / Tasks in Scientific Organizations

Türk Biyokimya Derneği, Member, 2011 - Continues

Scientific Refereeing

PEERJ, Journal Indexed in SSCI, May 2021

Project Supported by Higher Education Institutions, BAP Research Project, Selcuk University, Turkey, October 2019

JOURNAL OF BIOMEDICAL INFORMATICS, SCI Journal, July 2018

OMICS-A JOURNAL OF INTEGRATIVE BIOLOGY, SCI Journal, September 2017

FRONTIERS IN MICROBIOLOGY, SCI Journal, June 2015

Metrics

Publication: 21

Citation (WoS): 56

Citation (Scopus): 57

H-Index (WoS): 4

H-Index (Scopus): 3

Congress and Symposium Activities

8. ULPAS Sempozyumu, Invited Speaker, Eskişehir, Turkey, 2021

Bio Türkiye, Invited Speaker, İstanbul, Turkey, 2020

Sağlıkta Yapay Zeka Kongresi 2020, Invited Speaker, İzmir, Turkey, 2020

Euroasian Congress on Molecular Biotechnology, Working Group, Trabzon, Turkey, 2019

2nd International Conference on Life and Engineering Sciences, Working Group, İstanbul, Turkey, 2019

Uluslararası İslam Eğitimi Kongresi, Invited Speaker, İstanbul, Turkey, 2019

International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), Attendee, Ankara, Turkey, 2018

Invited Talks

İLEM 6. Yaz Akademisi, Workshop, İlimi Etüdler Derneği, Turkey, July 2021

Tıp ve Genetikte Veri Eksenli Etik Sorunlar, Seminar, BURA Boğaziçililer Derneđi, Turkey, June 2021

9. ULUSLARARASI LİF VE POLİMER ARAŞTIRMALARI SEMPOZYUMU, Conference, Bursa Uludađ Üniversitesi, Turkey, June 2021

Biyomühendislik Konuşmaları: Biyoenformatik, Seminar, İstanbul Medeniyet Üniversitesi MEDİS, Turkey, June 2021

Yaşam Bilimlerinde ve Sağlıkta Yapay Zeka, Seminar, Sakarya Üniversitesi YediHilal Topluluđu, Turkey, April 2021

Biyoenformatik, Seminar, Bezmialem Üniversitesi Etik Klübü, Turkey, March 2021

Gelenekten geleceđe bilim, Seminar, Kızılay Kadıköy Şubesi, Turkey, December 2019

Biyoenformatik Ve Sağlık Hizmetleri, Workshop, Marmara Üniversitesi, Turkey, May 2019