

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>

Education Information

Doctorate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 2010 - 2016

Postgraduate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 2004 - 2010

Undergraduate, Boğaziçi Üniversitesi, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 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

Biyoinformatik 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

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

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- 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, 2021 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **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 (National Refereed University Journal)
- II. **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 (Other Refereed National Journals)
- III. **Yaşam Bilimlerinde Yeni Paradigma**
Karabekmez M. E.
Hayat Sağlık, no.18, pp.12-15, 2018 (National Non-Refereed 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.

22nd IUBMB Congress/37th FEBS Congress, Sevilla, Spain, 4 - 09 September 2012, vol.279, pp.482

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

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

Edit 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

Citations

Total Citations (WOS):56

h-index (WOS):4

Invited Talks

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

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

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

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

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

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

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

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