

## Asst. Prof. Mehmet TARDU

### Personal Information

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### International Researcher IDs

ORCID: 0000-0003-1674-5958

Yoksis Researcher ID: 256467

### Education

Doctorate, Koc University, Institute Of Science, Department Of Computational Engineering (Interdisciplinary), Turkey  
2010 - 2016

Postgraduate, Bogazici University, Institute Of Biomedical Engineering, Biomedical Engineering, Turkey 2007 - 2010

Undergraduate, Bogazici University, Faculty Of Arts And Sciences, Department Of Molecular Biology And Genetics, Turkey  
2002 - 2007

### Dissertations

Doctorate, The effect of blue light on unicellular organisms at transcriptome level, Koc University, Institute Of Science, Department Of Computational Engineering (Interdisciplinary), 2016

Postgraduate, A correlational study between serum cytokine measures, volumetric MR measures and global cognitive changes in alzheimer's disease, Bogazici University, Institute Of Biomedical Engineering, Biomedical Engineering, 2010

### Research Areas

Health Sciences, Natural Sciences

### Academic Positions

Assistant Professor, Istanbul University, Faculty of Science, Depertment of Biology, 2021 - Continues  
Researcher, University of Michigan - Ann Arbor, Life Sciences Institute, Chemistry, 2017 - 2021

### Journal articles indexed in SCI, SSCI, and AHCI

#### I. Conserved 5-methyluridine tRNA modification modulates ribosome translocation.

Jones J. D., Franco M. K., Giles R. N., Eyler D. E., Tardu M., Smith T. J., Snyder L. R., Polikanov Y. S., Kennedy R. T., Niederer R. O., et al.

Proceedings of the National Academy of Sciences of the United States of America, vol.121, no.35, 2024 (SCI-Expanded)

#### II. Pseudouridine synthase 7 is an opportunistic enzyme that binds and modifies substrates with diverse sequences and structures

- Purchal M. K., Eyler D. E., TARDU M., Franco M. K., Korn M. M., Khan T., McNassor R., Giles R., Lev K., Sharma H., et al. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.119, no.4, 2022 (SCI-Expanded)
- III. mRNA and tRNA modification states influence ribosome speed and frame maintenance during poly(lysine) peptide synthesis**  
 Smith T. J., Tardu M., Khatri H. R., Koutmou K.  
 JOURNAL OF BIOLOGICAL CHEMISTRY, vol.298, no.6, 2021 (SCI-Expanded)
- IV. Identification and Characterization of a New Class of (6-4) Photolyase from *Vibrio cholerae***  
 Dikbas U. M., Tardu M., Canturk A., Gul Ş., Ozcelik G., Baris I., Ozturk N., Kavakli I. H.  
 BIOCHEMISTRY, vol.58, no.43, pp.4352-4360, 2019 (SCI-Expanded)
- V. Comparative RNA-seq analysis of the drought-sensitive lentil (*Lens culinaris*) root and leaf under short- and long-term water deficits**  
 Morgil H., Tardu M., Cevahir G., Kavakli I. H.  
 FUNCTIONAL & INTEGRATIVE GENOMICS, vol.19, no.5, pp.715-727, 2019 (SCI-Expanded)
- VI. Cryptochrome deletion in p53 mutant mice enhances apoptotic and anti-tumorigenic responses to UV damage at the transcriptome level**  
 Cavga A. D., Tardu M., Korkmaz T., Keskin O., Ozturk N., Gursoy A., Kavakli I. H.  
 FUNCTIONAL & INTEGRATIVE GENOMICS, vol.19, no.5, pp.729-742, 2019 (SCI-Expanded)
- VII. Identification and Quantification of Modified Nucleosides in *Saccharomyces cerevisiae* mRNAs**  
 Tardu M., Jones J. D., Kennedy R. T., Lin Q., Koutmou K. S.  
 ACS CHEMICAL BIOLOGY, vol.14, no.7, pp.1403-1409, 2019 (SCI-Expanded)
- VIII. Understanding lipid metabolism in high-lipid-producing *Chlorella vulgaris* mutants at the genome-wide level**  
 Sarayloo E., Tardu M., Unlu Y. S., Simsek S., Cevahir G., Erkey C., Kavakli I. H.  
 ALGAL RESEARCH-BIOMASS BIOFUELS AND BIOPRODUCTS, vol.28, pp.244-252, 2017 (SCI-Expanded)
- IX. MerR and ChrR mediate blue light induced photo-oxidative stress response at the transcriptional level in *Vibrio cholerae***  
 Tardu M., Bulut S., Kavakli I. H.  
 SCIENTIFIC REPORTS, vol.7, 2017 (SCI-Expanded)
- X. The Photolyase/Cryptochrome Family of Proteins as DNA Repair Enzymes and Transcriptional Repressors**  
 Kavakli I. H., Baris I., Tardu M., Gul Ş., Oner H., Cal S., Bulut S., Yarparvar D., Berkel C., Ustaoglu P., et al.  
 PHOTOCHEMISTRY AND PHOTOBIOLOGY, vol.93, no.1, pp.93-103, 2017 (SCI-Expanded)
- XI. RNA-seq analysis of the transcriptional response to blue and red light in the extremophilic red alga, *Cyanidioschyzon merolae***  
 Tardu M., Dikbas U. M., Baris I., Kavakli I. H.  
 FUNCTIONAL & INTEGRATIVE GENOMICS, vol.16, no.6, pp.657-669, 2016 (SCI-Expanded)
- XII. MILP-HYPERBOX CLASSIFICATION FOR STRUCTURE-BASED DRUG DESIGN IN THE DISCOVERY OF SMALL MOLECULE INHIBITORS OF SIRTUIN6**  
 Tardu M., Rahim F., Kavakli I. H., Turkay M.  
 RAIRO-OPERATIONS RESEARCH, vol.50, no.2, pp.387-400, 2016 (SCI-Expanded)
- XIII. Reduced Glucose Sensation Can Increase the Fitness of *Saccharomyces cerevisiae* Lacking Mitochondrial DNA**  
 Akdogan E., Tardu M., Garipler G., Baytek G., Kavakli I. H., Dunn C. D.  
 PLOS ONE, vol.11, no.1, 2016 (SCI-Expanded)

## Books

- I. Kanserde DNA Tamiri Ve Tedavide DNA Tamir Yolakları**  
 Kavaklı İ. H., Gül Ş., Tardu M., Barış İ.

in: Kanser Moleküler Biyolojisi, Yusuf Baran, Editor, Kisayol Yayıncılık, İstanbul, pp.173-184, 2018

## Other Publications

### I. tRNA Metiltransferaz Maya Mutantlarının Farklı Tuz Stresi Koşullarında Büyüme Karakteristiklerinin Tespit Edilmesi

Korkmaz A. A., Irez B. G., Vural S., Ceylan S., Tardu M.

Presentation, pp.82, 2023

## Funded Projects

TARDU M., DEMİR Z., ARSLAN S., TURGUT Ç., ÖZDEMİR M. D., KORKMAZ A. A., AKÇAY N., Project Supported by Higher Education Institutions, RNA-temelli Aşı ve Terapötiklerin Geliştirilmesi Kapsamında RNA Biyolojisi Araştırmaları Laboratuvarı Altyapısı Süreklliliği Desteği, 2024 - 2024

Tardu M., H2020 Project, Engineering Microalgae To Enhance Lipid Productivities For Industrial Scale Biodiesel Production , 2022 - 2024

## Metrics

Publication: 15

Citation (WoS): 315

Citation (Scopus): 348

H-Index (WoS): 9

H-Index (Scopus): 10

## Scholarships

Post Doctoral Research Fellow, University, 2017 - 2021

Doktora Eğitim Bursu, University, 2010 - 2016