Asst. Prof. Mehmet TARDU

Personal Information

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Education Information

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 Titles / Tasks

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

Published journal articles indexed by 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 & Book Chapters

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, Kısayol 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

Supported 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 Sürekliliği 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): 277
Citation (Scopus): 311
H-Index (WoS): 8
H-Index (Scopus): 9

Scholarships

Post Doctoral Research Fellow, University, 2017 - 2021
Doktora Eğitim Bursu, University, 2010 - 2016