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Education

Doctorate 2022 - Continues	Yildiz Technical University, Faculty Of Arts & Science, Department Of Molecular Biology And Genetics, Turkey

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Occupational Health and Safety, Afet ve Acil Durum Eğitimi, Yıldız Teknik Üniversitesi, 2022
Personal Evolution, 2.Computer-Aided Drug Design Symposium and Workshop, Biruni Üniversitesi, 2022
Personal Evolution, CRISPR-cas: Gen Düzenleme Uygulamaları, Hacettepe Üniversitesi Uluslararası Gıda Biyogüvenlik ve Biyoteknoloji Merkezi(IFBBC), 2021

Dissertations

Postgraduate, ACE2 RESEPTÖRÜNÜN TAHMİNİ MUTASYON NOKTALARININ VE ETKİLERİNİN İN SİLİCO OLARAK BELİRLENMESİ, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2022

Academic Titles / Tasks

Research Assistant 2021 - Continues	Yildiz Technical University, Faculty Of Arts & Science, Department Of Molecular Biology And Genetics
Research Assistant 2020 - 2021	Afyon Kocatepe University, Fen Edebiyat Fakültesi, Moleküler Biyoloji ve Genetik

Supported Projects

1. Özdemir Özgentürk N., Özbek T., Aktaş E., Derman S., Pelit Arayıcı P., TUBITAK Project, Biyoinformatik Olarak

Tasarlanmış Modifiye ACE2 Protein ve Peptidlerin COVID-19 Hastalığına Karşı İnhibitör Ajan Potansiyelinin In vitro Değerlendirilmesi, 2023 - 2026

2. Tarhan B., Aktaş E., TUBITAK Project, Marburg Virüsüne Ait Nükleoprotein, Vp35, Vp30 Ve L Proteinlerinde Mutasyon Belirleme Ve Bu Proteinlerin Aşı Adaylığının İncelenmesi, 2024 - 2024

3. Özcan A. M., Aktaş E., TUBITAK Project, Semaglutid (Ozempic, Rybelsus) ilacının insan bağırsaklarında bulunan bakterilerin dış membran proteinleri ile etkileşiminin in siliko ortamda incelenmesi, 2024 - 2024

4. Öztürk S., Aktaş E., TUBITAK Project, Marburg Virüsündeki Glikoprotein , Vp24 Ve Vp40 Proteinlerinde Mutasyonlarının Belirlenmesi Ve Glikoproteinin İnsan Vücuduna Girmesine Sebep Olan Tam Ailesi İle Etkileşiminin İn Silico Olarak İncelenmesi, 2024 - 2024

5. Aldoğan E., Aktaş E., TUBITAK Project, Üçlü Negatif Meme Kanserine Neden Olan Reseptörlerin Yapılarının Biyoinformatik Olarak İncelenmesi, 2023 - 2024

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Identification of potential antigenic proteins and epitopes for the development of a monkeypox virus vaccine: an in silico approach**
Aktaş E., Sezerman O. U., Özer M., Kırboğa K. K., Köseoğlu A. E., Özdemir Özgentürk N.
MOLECULAR DIVERSITY, 2024 (SCI-Expanded)

2. **A comprehensive Study of Juglone's Effect on Polyphenol Oxidase in Cucumber: In Vitro Experiments and Computational Docking and Dynamics Insights**
Kocaçalışkan İ., Vural Korkut Ş., Aktaş E., Yalçın M., Özdemir Özgentürk N.
PHYSIOLOGIA PLANTARUM, vol.176, no.0031-9317, pp.1-13, 2024 (SCI-Expanded)

3. **A comprehensive examination of ACE2 receptor and prediction of spike glycoprotein and ACE2 interaction based on in silico analysis of ACE2 receptor**
Aktaş E., Özgentürk N. Ö.
JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS, vol.42, no.9, pp.4412-4428, 2024 (SCI-Expanded)

4. **Bioinformatic investigation of Nipah virus surface protein mutations: Molecular docking with Ephrin B2 receptor, molecular dynamics simulation, and structural impact analysis**
Aktaş E., Saygılı İ., Kahveci E., Tekbıyık Z., Özgentürk N. Ö.
MICROBIOLOGY AND IMMUNOLOGY, vol.67, no.12, pp.501-513, 2023 (SCI-Expanded)

Articles Published in Other Journals

1. **Bioinformatics-Driven Structural and Pharmacological Analysis of SLITRK1 in Tourette Syndrome: Impact of S656M Mutation Using Molecular Dynamics, Docking, and Reinforcement Learning**
Aktaş E., İslim A. R., Kırboğa K. K., Yıldız D., Özdemir Özgentürk N., Rudrapal M., Khan J., Achar R. R., Silina E., Manturov N. A., et al.
Computation, vol.13, no.2, pp.1-27, 2025 (ESCI)

2. **Revealing In Silico that Bacteria's Outer Membrane Proteins may Help our Bodies Replicate and Carry Severe Acute Respiratory Syndrome Coronavirus 2**
Aktaş E., Özdemir Özgentürk N.
Bioinformatics and Biology Insights, vol.16, pp.1-7, 2022 (ESCI)

3. **Bioinformatic analysis reveals that some bacteria may aid SARS-CoV-2 spread and entry into host cells**
Aktas E., Korcan S. E., ÖZDEMİR ÖZGENTÜRK N., Erismis U. C.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.39, no.3, pp.248-259, 2021 (ESCI)

4. **Bioinformatics Analysis Unveils Certain Mutations Implicated in Spike Structure Damage and Ligand-Binding Site of Severe Acute Respiratory Syndrome Coronavirus 2**

Aktas E.
Bioinformatics and Biology Insights, vol.15, 2021 (ESCI)

Books

1. **The Role of MicroRNAs (MiRNAs) in Neurodegenerative Diseases**
   Şahin K. N., Sever T., Aktaş E., Özdemir Özgentürk N.
   in: THE BROAD SPECTRUM OF BIOLOGICAL SCIENCES, Dr. Sevgi MARAKLI,Dr. Merve YILMAZER, Editor, Gaziantep University Press, Gaziantep, pp.475-491, 2024

2. **INVESTIGATION OF THE INTERACTION OF THE DRUG SEMAGLUTIDE (OZEMPIC, RYBELSUS) WITH OUTER MEMBRANE PROTEINS OF GUT BACTERIA IN SILICO**
   Özcan A. M., Aydın M., Aktaş E., Özdemir Özgentürk N.
   in: II. INTERNATIONAL SCIENCES CONGRESS-CONFERENCE BOOK, ASSIST. PROF. BURCU OZUBERK, Editor, ARCENG PUBLICATIONS, Eskişehir, pp.5-10, 2024

3. **DETERMINATION OF MUTATIONS IN THE GLYCOPROTEIN, VP24 AND VP40 PROTEINS IN THE MARBURG VIRUS AND INVESTIGATION IN SILICO OF THE INTERACTION OF THE GLYCOPROTEIN WITH ITS TAM FAMILY THAT CAUSES ITS INTRODUCTION TO THE HUMAN BODY**
   Öztürk S., Tarhan B., Aktaş E., Özdemir Özgentürk N.
   in: ARCENG INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE, ASSIST. PROF. BURCU OZUBERK, Editor, ARCENG PUBLICATIONS,, Eskişehir, pp.11-22, 2024

4. **İLERİ DÜZEYDE MULTİPLE SKLEROZ HASTALIĞINDA EKSPRESYONU ARTAN miRNA'LARIN ARALARINDAKİ ETKİLEŞİMİN VE İLİŞKİLİ OLABİLECEK miRNA'LARIN İNCELENMESİ**
   Sever T., Şahin K. N., Aktaş E., Özdemir Özgentürk N.
   in: ARCENG INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE, ASSOC. PROF. SECIL KARTOPU, Editor, ARCENG PUBLICATIONS –2024, İstanbul, pp.58-67, 2024

5. **In Silico Identification of Possible Mutation-Prone Regions of the GRIA3 Protein**
   Keskin Z. N., Aktaş E., Özdemir Özgentürk N.
   in: Current Debates on Natural and Engineering Sciences 9, Hikmet Y. ÇOĞUN,İshak PARLAR,Hasan ÜZMUŞ, Editor, Bilgin Kültür Sanat Yayınları, Ankara, pp.73-79, 2023

6. **Bioinformatics Analysis of ANGPTL4**
   Bilir E., Malkoç M., Aktaş E., Özdemir Özgentürk N.
   in: Current Debates on Health Sciences 4, Recep Akkaya,Birnur Akkaya, Editor, Bilgin Kültür Sanat Yayınları, Ankara, pp.438-450, 2022

Papers Published in Refereed Scientific Meetings

1. **IDENTIFICATION OF POTENTIAL EPITOPES FOR THE DEVELOPMENT OF A PEPTIDEBASED VACCINE AGAINST NIPAH VIRUS THROUGH BIOINFORMATICS APPROACHES**
   Saygılı İ., Aktaş E., Özdemir Özgentürk N.
   ARCENG III. INTERNATIONAL SCIENTIFIC RESEARCH CONGRESS, İstanbul, Turkey, 1 - 02 February 2025, pp.145-160

2. **MUTATION ANALYSIS OF NUCLEOPROTEIN, VP35, VP30, AND L PROTEINS OF THE MARBURG VIRUS AND IN SILICO EVALUATION OF THEIR POTENTIAL AS VACCINE CANDIDATES**
   Tarhan B., Öztürk S., Aktaş E., Özdemir Özgentürk N.
   ARCENG III. INTERNATIONAL SCIENTIFIC RESEARCH CONGRESS, İstanbul, Turkey, 1 - 02 February 2025, pp.161-168

3. **Structural Dynamics and Pharmacological Interactions of SLITRK1 Protein**
   Aktaş E., Yıldız D., Islim A. R., Özdemir Özgentürk N.
   2ND MEETING ON MACHINE LEARNING AND NON-GLOBULAR PROTEINS | 2024, Thessaloniki, Greece, 14 - 17 May

2024, pp.41-42

4. **Exploring Axolotl Regeneration: Bioinformatic Insights into the Wnt/ß-Catenin Pathway and ProteinVitamin Interactions for Advancing Regenerative Medicine**
Aktaş E., Koç B. B., Özdemir Özgentürk N.
6th International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 11 - 13 October 2023, pp.1489

5. **Bioinformatics analysis of miRNA expression profile according to gender in Relapsing-Remitting Multiple Sclerosis patients**
Aktaş E., Şahin K. N., Sever T., Özdemir Özgentürk N.
6th International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 11 - 13 October 2023, pp.1488

6. **Determination of Possible Mutation-prone Positions and Effects of SLITRK Protein in Silico**
İslim A., Yıldız D., Aktaş E., Özdemir Özgentürk N.
3 th International Congress of Engineering and Natural Sciences Studies, Ankara, Turkey, 24 - 25 May 2023, pp.122

7. **Determination of Single Nucleotide Polymorphisms (SNPs) in Human CAPN3 Gene by In Silico Analysis**
Kayışlı G., Dilemek B., Aktaş E., Özdemir Özgentürk N.
3 th International Congress of Engineering and Natural Sciences, Ankara, Turkey, 24 - 25 May 2023, pp.417-426

8. **BIOINFORMATICS INVESTIGATION OF THE STRUCTURE OF AROMATASE ENZYME RELATED WITH BREAST CANCER**
Aktaş E., Karyemez E., Özdemir Özgentürk N.
CUMHURIYET 8th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Ankara, Turkey, 23 April 2023, pp.13

9. **FINDING GENES RELATED WITH FEMALE INFERTILITY LIKE WNT4 AS A RESULT OF BIOINFORMATIC ANALYSIS**
Aktaş E., Kayım E., Özdemir Özgentürk N.
CUMHURIYET 8th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES , Ankara, Turkey, 23 April 2023, pp.14

10. **Bioinformatics Analysis of ANGPTL4 Mediating Inactivation of Lipoprotein Lipase LPL**
Aktaş E., Özdemir Özgentürk N., Malkoç M., Bilir E.
International Congress of Medical and Health Sciences Studies, Ankara, Turkey, 13 December 2022, pp.198

11. **Bioinformatics Analysis of ANGPTL4 Mediating Inactivation of Lipoprotein Lipase LPL**
AKTAŞ E., ÖZDEMİR ÖZGENTÜRK N., Malkoç M., Bilir E.
International Congress of Medical and Health Sciences Studies, Ankara, Turkey, 13 December 2022, vol.1, pp.438-450

12. **IDENTITY OF ACE2 AS A RESULT OF BIOINFORMATIC INVESTIGATIONS**
Aktaş E., Özdemir Özgentürk N.
CUMHURIYET 6th INTERNATIONAL CONGRESS ON APPLIED SCIENCES, Ankara, Turkey, 23 April 2022, pp.2

Metrics

Publication: 27
Citation (WoS): 8
Citation (Scopus): 19
H-Index (WoS): 2
H-Index (Scopus): 3

Congress and Symposium Activities

ESFLU second annual scientific and networking meeting, Attendee, Thessaloniki, Greece, 2024
2ND ML4NGP MEETING ON MACHINE LEARNING AND NON-GLOBULAR PROTEINS, Attendee, Thessaloniki, Greece, 2024

Research Areas

Life Sciences, Bioinformatics, Molecular Biology and Genetics