

Assoc. Prof. AHMET CAN TİMUÇİN

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABI-6250-2020

ScopusID: 56800816600

Yoksis Researcher ID: 263934

Education Information

Post Doctorate, Sabanci University, Graduate School of Engineering and Natural Sciences, Biological Sciences and Bioengineering Program, Turkey 2015 - 2017

Doctorate, Sabanci University, Graduate School of Engineering and Natural Sciences, Biological Sciences and Bioengineering Program, Turkey 2008 - 2015

Postgraduate, Columbia University in the City of New York, College of Physicians and Surgeons, Institute of Human Nutrition, United States Of America 2007 - 2008

Undergraduate, Sabanci University, Faculty of Engineering and Natural Sciences, Biological Sciences and Bioengineering Program, Turkey 2003 - 2007

Dissertations

Doctorate, IDENTIFICATION OF SIRT1 AS A NOVEL REGULATOR OF NFAT5 DEPENDENT ALDOSE REDUCTASE EXPRESSION UNDER OSMOTIC STRESS, Sabanci University, Graduate School of Engineering and Natural Sciences, Biological Sciences and Bioengineering Program, 2015

Postgraduate, Modulation of Cell Death by Aldose Reductase Pathway in Diabetic Hearts, Columbia University in the City of New York, College of Physicians and Surgeons, Institute of Human Nutrition, 2008

Research Areas

Molecular Biochemistry, Structural Biology, Biological Modelling, Molecular Biology of Cancer, Protein Engineering

Academic Titles / Tasks

Associate Professor, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering and Natural Sciences, Department of Molecular Biology & Genetics, 2022 - Continues

Assistant Professor, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering and Natural Sciences, Department of Molecular Biology & Genetics, 2021 - 2022

Academic and Administrative Experience

Accreditation Commission Member - Department of Molecular Biology and Genetics, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences, Molecular Biology And Genetics, 2023 - Continues
Faculty Board Member, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences, Molecular Biology And Genetics, 2023 - Continues
Deputy Head of Department, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering and Natural Sciences, Department of Molecular Biology and Genetics, 2022 - Continues
Faculty of Engineering and Natural Sciences Education Commission, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences, Molecular Biology And Genetics, 2022 - Continues
Advisory Board Member for Department of Molecular Biology & Genetics, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences, Molecular Biology And Genetics, 2022 - Continues
Coordinator of Mentor-Mentee Program for Department of Molecular Biology & Genetics , Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering and Natural Sciences, Department of Molecular Biology & Genetics, 2022 - Continues
University Education Commission, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering and Natural Sciences, Department of Molecular Biology & Genetics , 2021 - Continues
Department Education Commission, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences, Department of Molecular Biology & Genetics , 2021 - Continues

Courses

Genomics, Undergraduate, 2022 - 2023, 2021 - 2022
Seminar, Undergraduate, 2022 - 2023, 2021 - 2022
Senior Project II, Undergraduate, 2022 - 2023, 2021 - 2022
Orientation, Undergraduate, 2023 - 2024, 2022 - 2023
General Biology I, Undergraduate, 2023 - 2024
Seminar, Postgraduate, 2022 - 2023, 2021 - 2022
RNA World, Undergraduate, 2023 - 2024, 2022 - 2023
Senior Project I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Structural Biology, Undergraduate, 2023 - 2024
Molecular and Translational Biomedicine, Postgraduate, 2022 - 2023, 2021 - 2022
Molecular Cellular Biology II, Undergraduate, 2022 - 2023, 2021 - 2022
Research Methods and Ethics in Molecular Biology and Genetics, Postgraduate, 2023 - 2024
Advanced Structural Biology, Postgraduate, 2023 - 2024
Introduction to Molecular and Translational Biomedicine, Postgraduate, 2022 - 2023, 2021 - 2022
Genetics & Genomics, Postgraduate, 2021 - 2022
Research Techniques and Ethics in Natural Sciences, Postgraduate, 2022 - 2023
Computational Biology, Undergraduate, 2022 - 2023
Biostatistics, Undergraduate, 2021 - 2022
Introduction to Bioinformatics, Undergraduate, 2021 - 2022

Advising Theses

Timuçin A. C., Kocagöz Z. T., Rational Peptide Design Towards Recognition of FABP3 and Myoglobin, Postgraduate, B.Karadeniz(Student), Continues
Timuçin A. C., Kocagöz Z. T., Rational Peptide Design Towards Recognition of cTnI and copeptin, Postgraduate, B.Şentürk(Student), Continues
Timuçin A. C., Computational peptide design targeting dimerization of the transcriptional repressor BACH2, Postgraduate, E.Acar(Student), Continues
Timuçin A. C., Optimization of anti-THC Fab fragment with molecular dynamic simulations for increasing its affinity

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Detection of a rare variant in PSTPIP1 through three generations in a family with an initial diagnosis of FMF/MKD-overlapping phenotype**
Özkılınç Önen M., Onat U. İ., Uğurlu S., Timuçin A. C., Öz Arslan D., Everest E., Özdoğan H., Tahir Turanlı E.
RHEUMATOLOGY, no.9, pp.3188-3196, 2023 (SCI-Expanded)
- II. **Modeling and dynamical analysis of the full-length structure of factor XII with zinc.**
Kılınç E., Can Timucin A. C., Selim Cinaroglu S., Timucin E.
Journal of molecular modeling, vol.28, no.5, pp.129, 2022 (SCI-Expanded)
- III. **Toward Compilation of Balanced Protein Stability Data Sets: Flattening the Delta Delta G Curve through Systematic Enrichment**
Kebabci N., TİMÜÇİN A. C., TİMÜÇİN E.
JOURNAL OF CHEMICAL INFORMATION AND MODELING, vol.62, no.5, pp.1345-1355, 2022 (SCI-Expanded)
- IV. **Bridging the Bridging Imidazolate in the Bimetallic Center of the Cu/Zn SOD1 and ALS**
TİMÜÇİN A. C., Cinaroglu S. S., SEZERMAN O. U., TİMÜÇİN E.
FRONTIERS IN CHEMISTRY, vol.9, 2021 (SCI-Expanded)
- V. **Structure based peptide design, molecular dynamics and MM-PBSA studies for targeting C terminal dimerization of NFAT5 DNA binding domain**
Timucin A. C.
JOURNAL OF MOLECULAR GRAPHICS & MODELLING, vol.103, 2021 (SCI-Expanded)
- VI. **The sex-dependent anti-depressant-like effects of zeatin in rat behavioral despair model as a candidate A2A receptor ligand**
Oz P., Timucin A. C., Teomete S., Akpunar F., Tufanc C., Ogur D., Uzbay T.
NEUROSCIENCE LETTERS, vol.734, 2020 (SCI-Expanded)
- VII. **Immunotherapy approaches on innate immunity for SARS-Cov-2**
Arslan B. A., Timucin A. C.
ACTA VIROLOGICA, vol.64, no.4, pp.389-395, 2020 (SCI-Expanded)
- VIII. **Selective targeting of antiapoptotic BCL-2 proteins in cancer**
Timucin A. C., Basaga H., Kutuk O.
MEDICINAL RESEARCH REVIEWS, vol.39, no.1, pp.146-175, 2019 (SCI-Expanded)
- IX. **Pro-apoptotic effects of lipid oxidation products: HNE at the crossroads of NF-kappa B pathway and anti-apoptotic Bcl-2**
Timucin A. C., Basaga H.
FREE RADICAL BIOLOGY AND MEDICINE, vol.111, pp.209-218, 2017 (SCI-Expanded)
- X. **AMP-Activated Protein Kinase Couples 3-Bromopyruvate-Induced Energy Depletion to Apoptosis via Activation of FoxO3a and Upregulation of Proapoptotic Bcl-2 Proteins**
Bodur C., Karakas B., Timucin A. C., Tezil T., Basaga H.
MOLECULAR CARCINOGENESIS, vol.55, no.11, pp.1584-1597, 2016 (SCI-Expanded)
- XI. **SIRT6 Is a Positive Regulator of Aldose Reductase Expression in U937 and HeLa cells under Osmotic Stress: In Vitro and In Silico Insights**
Timucin A. C., Basaga H.
PLOS ONE, vol.11, no.8, 2016 (SCI-Expanded)
- XII. **Screening of new antileukemic agents from essential oils of algae extracts and computational modeling of their interactions with intracellular signaling nodes**
Ataseyer-Arslan B., Yilancioglu K., Kalkan Z., Timucin A. C., Gur H., Isik F. B., Deniz E., Erman B., Cetiner S.
EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES, vol.83, pp.120-131, 2016 (SCI-Expanded)
- XIII. **SIRT1 contributes to aldose reductase expression through modulating NFAT5 under osmotic stress: In vitro and in silico insights**

Timucin A. C., Bodur C., Basaga H.

CELLULAR SIGNALLING, vol.27, no.11, pp.2160-2172, 2015 (SCI-Expanded)

XIV. ANTIBODY ARRAY-BASED IMMUNOSENSOR FOR DETECTING CARDIOVASCULAR DISEASE RISK MARKERS

Timucin C., Gul O., Kutuk O., Basaga H.

JOURNAL OF IMMUNOASSAY & IMMUNOCHEMISTRY, vol.33, no.3, pp.275-290, 2012 (SCI-Expanded)

XV. Identification of biomarkers for the antiangiogenic and antitumour activity of the superoxide dismutase 1 (SOD1) inhibitor tetrathiomolybdate (ATN-224)

Donate F., Juarez J. C., Burnett M. E., Manuia M. M., Guan X., Shaw D. E., Smith E. L. P., Timucin C., Braunstein M. J., Batuman O. A., et al.

BRITISH JOURNAL OF CANCER, vol.98, no.4, pp.776-783, 2008 (SCI-Expanded)

Articles Published in Other Journals

I. Selective cytotoxicity of chemical composition of Spirulina platensis extract in endometrial cells: In vitro and in silico approach

Atasever Arslan B., Yilancioğlu K., Timuçin A. C., Kalkan Z., Kuşoğlu Gültekin S., Çetiner S.

KSU TARIM VE DOGA DERGISI-KSU JOURNAL OF AGRICULTURE AND NATURE, vol.0, 2022 (Peer-Reviewed Journal)

II. Towards Compilation of Balanced Protein Stability Datasets: Flattening the $\Delta\Delta G$ Curve through Systematic Under-sampling

Timuçin A. C., Timuçin E.

BIORXIV, vol.0, pp.1-31, 2021 (Non Peer-Reviewed Journal)

III. Molecular Dynamics and MM-PBSA Studies for Deciphering Molecular Interactions of Valproic Acid with CYP2C9 Mutants F114L and I207T

Timuçin A. C.

Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.25, pp.64-73, 2021 (Peer-Reviewed Journal)

IV. Conserved Amino Acids in HCoV-HKU1 and SARS-Cov2 at RNA-dependent RNA Polymerase (RdRp) Motifs

Timuçin A. C.

Anatolian Journal of Biology, vol.2, pp.17-24, 2021 (Peer-Reviewed Journal)

V. Computational Modeling of Trans-Zeatin as a Novel Target of Adenosine A2A Receptor: Insights into Molecular Interactions

Timuçin A. C.

The Journal of Neurobehavioral Sciences, vol.7, pp.118-129, 2020 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. Computational Design of RNA Based Modulators Targeting Maf-A protein for Multiple Myeloma

Yıldırım Akdeniz G., Başağa S. H., Timuçin A. C.

Intelligent Systems for Molecular Biology/European Conference on Computational Biology 2023, Lyon, France, 23 - 27 July 2023

II. Structure based peptide design, molecular dynamics and MM-PBSA studies for targeting transcription factors

Timuçin A. C.

10.Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, İstanbul, Turkey, 17 - 19 December 2021

III. Computational design of a peptide targeting homodimerization of BACH2 BTB domain using molecular dynamics and MM-PBSA studies

Timuçin A. C.

4th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2021), Ankara, Turkey, 24 - 26 November 2021, pp.1-2

IV. Molecular dynamics and MM-PBSA based relative binding free energy prediction studies for identification of novel amino acids and nucleic acids governing the interaction between transcription factor NFAT5 and its target consensus DNA sequence

Timuçin A. C.

10th International Molecular Biology and Biotechnology Congress, İstanbul, Turkey, 4 - 08 October 2021, pp.1

V. Early biomarkers for the anti-angiogenic and anti-tumor activity of the superoxide dismutase 1 (SOD1) inhibitor tetrathiomolybdate

Braunstein M. J., Smith E., Timucin C., Donate F., Juarez J. C., Burnett M., Manuia M., Shaw D. E., Mazar A. P., Batuman O.

49th Annual Meeting of the American-Society-of-Hematology, Georgia, United States Of America, 8 - 11 December 2007, vol.110

VI. Differential effects of Hsp70 inhibition within the tumor and microenvironment in multiple myeloma.

Braunstein M. J., Liu N., Klueppelberg U., Scott C., Behrman S., Tamucin C., Walter P., Wipf P., Brodsky J., Batuman O.

48th Annual Meeting of the American-Society-of-Hematology, Florida, United States Of America, 9 - 12 December 2006, vol.108

Supported Projects

Timuçin A. C., Tahir Turanlı E., Onat U. İ., TUBITAK Project, Investigation of functional roles of LAMA5 gene variants identified in a cohort of Turkish multiple sclerosis families on the disease pathophysiology, 2023 - 2026

Timuçin A. C., Gürol İ., Can Ö., Kocagöz Z. T., TUBITAK Project, Detection and monitorization of cardiovascular disease parameter through MEMS structured sensor systems (KARMEMS) , 2022 - 2026

Timuçin A. C., Külâh H., Gürol İ., Can Ö., Kocagöz Z. T., TUBITAK Project, MAESTRO - Micro Medical Technologies Platform, 2022 - 2026

Timuçin A. C. , Cuadrado A., TÜBİTAK - AB COST Project, Bench to bedside transition for pharmacological regulation of NRF2 in noncommunicable diseases (BenBedPhar), 2021 - 2025

Timuçin A. C., Timuçin E., Başağa S. H., TÜBİTAK - AB COST Project, Rational design of peptides targeting BTB domain homodimerization of BACH2, a nuclear suppressor NRF2 transcription factor: Complementary in silico and in vitro approaches, 2022 - 2024

Timuçin A. C., Timuçin E., Belkaya S., TUBITAK Project, Peptide-based Inhibitor Discovery Targeting the Human IL18:IL18R α Complex, 2022 - 2024

Timuçin A. C., Timuçin E., TUBITAK Project, SEMI-RATIONAL PEPTIDE DESIGN TARGETING AURORA A/N-MYC COMPLEX AND EXPERIMENTAL VALIDATIONS , 2021 - 2023

Timuçin A. C. , TUBITAK Project, In silico development of peptide-based inhibitor candidate molecules targeting NFAT5 dimerization domain , 2019 - 2020

Timuçin A. C. , Sözer B., TUBITAK Project, In silico peptide design and molecular analyses for inhibiting dimerization of K-RAS, 2019 - 2020

Timuçin A. C. , Başağa S. H. , TUBITAK Project, RESEARCH AND DEVELOPMENT OF NANOPARTICLE AND PHOTODYNAMIC THERAPY BASED ADVANCED THERANOSTIC APPLICATIONS FOR CANCER , 2016 - 2019

Timuçin A. C. , Başağa S. H. , TÜBİTAK International Multi-Cooperation Project, Advanced theranostic approach in cancer combining photodynamic therapy and nanoparticles, 2016 - 2019

Timuçin A. C. , Project Supported by Higher Education Institutions, Sabancı University Individual Research Fund, 2017 - 2017

Memberships / Tasks in Scientific Organizations

COST Action - BenBedPhar Management Committee Member, Country Representative, 2021 - 2025, Spain

Scientific Research / Working Group Memberships

Cost Action - Benbedphar Working Group 2, Acibadem Mehmet Ali Aydinlar University, Turkey,
<https://benbedphar.org/>, 2021 - 2025

Metrics

Publication: 26

Citation (WoS): 187

Citation (Scopus): 201

H-Index (WoS): 7

H-Index (Scopus): 7