

Asst. Prof. ZEYNEP TOKCAER KESKİN

Personal Information

Email: Zeynep.Keskin@acibadem.edu.tr

Web: <https://avesis.acibadem.edu.tr/Zeynep.Keskin>

International Researcher IDs

ScholarID: 0ABHvJ8AAAAJ

ORCID: 0000-0001-7678-0590

Publons / Web Of Science ResearcherID: I-5158-2018

Yoksis Researcher ID: 239828

Education Information

Doctorate, İhsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Moleküler Biyoloji Ve Genetik (Dr), Turkey 2005 - 2010

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biyoloji (YI) (Tezli), Turkey 2001 - 2003

Undergraduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Biyolojik Bilimler Bölümü, Turkey 1997 - 2001

Dissertations

Doctorate, Contribution of mesenchymal stem cells in cell based therapies, İhsan Dogramaci Bilkent University, Mühendislik Ve Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik (Dr), 2010

Postgraduate, Response surface optimization of Bacillus thuringiensis israelensis fermentation, Middle East Technical University, Fen Bilimleri Enstitüsü, Biyoloji (YI) (Tezli), 2003

Research Areas

Animal Tissue Culture, Genetic Disorders, Genetic Engineering, Molecular Biology of Cancer

Academic Titles / Tasks

Assistant Professor, Acibadem Mehmet Ali Aydinlar University, Faculty of Humanities and Social Sciences, Molecular Biology And Genetics, 2015 - Continues

Research Assistant, Ankara University, Ankara Tip Fakültesi, Ankara Tip Pr., 2013 - 2015

Research Assistant, New York University, Medical School, Microbiology, 2012 - 2013

Research Assistant, New York University, Medical School, Neurosurgery, 2011 - 2012

Academic and Administrative Experience

Internship Committee Member, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences, Molecular Biology And Genetics, 2022 - Continues

Eğitim ve Müfredat Kurulu üyesi, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences,

Molecular Biology And Genetics, 2022 - Continues

Bölüm Stratejik Plan Komisyonu Üyesi, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering and Natural Sciences, Moleküler Biyoloji ve Genetik, 2018 - Continues

Deputy Head of Department, Acibadem Mehmet Ali Aydinlar University, Faculty Of Engineering And Natural Sciences, Molecular Biology And Genetics, 2021 - 2023

Acibadem Mehmet Ali Aydinlar University, 2020 - 2021

Staj Koordinatörü, Acibadem Mehmet Ali Aydinlar University, Faculty of Humanities and Social Sciences, Molecular Biology And Genetics, 2018 - 2021

Birim Kalite Komisyonu Üyesi, Acibadem Mehmet Ali Aydinlar University, Faculty of Humanities and Social Sciences, Molecular Biology And Genetics, 2018 - 2021

Courses

Kök Hücre ve Hücresel Tedaviler, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

General Biology 2, Undergraduate, 2023 - 2024

Gelişim Biyolojisi, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016

Research Methods and Ethics in Molecular Biology and Genetics, Postgraduate, 2023 - 2024

Seminar, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Biyoteknoloji ve genetik mühendisliği, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Seminar, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Molecular and Cellular Biology 1, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Orientation, Undergraduate, 2023 - 2024, 2022 - 2023

General Biology I, Undergraduate, 2023 - 2024

Senior Project 2, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Thesis, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Introduction to Molecular and Translational Biomedicine, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Senior Project 1, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Research Techniques and Etics in Natural Sciences, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Thesis, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Molecular and Translational Biomedicine, Postgraduate, 2021 - 2022, 2019 - 2020, 2018 - 2019, 2017 - 2018

Genetics, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Stem Cells and Regenerative Applications, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Biyokimya ve Genetik Araştırma Teknikleri, Undergraduate, 2015 - 2016

Genetik, Undergraduate, 2015 - 2016

Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Gebze Teknik Üniversitesi, September, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Gebze Teknik Üniversitesi, January, 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Overexpression of CXCL17 increases migration and invasion of A549 lung adenocarcinoma cells
Koni E., Congur I., Tokcaer Keskin Z.
FRONTIERS IN PHARMACOLOGY, vol.1, no.1, pp.1-9, 2024 (SCI-Expanded)
- II. Meta-analysis of commonly mutated genes in leptomeningeal carcinomatosis
Congur I., Koni E., Onat O. E., Keskin Z.
PeerJ, vol.11, 2023 (SCI-Expanded)
- III. MTHFR C677T mutation affects adipogenic differentiation abilities of human bone marrow-derived mesenchymal stem cells
Vural R., Çelik D., Peker E. B., Köni E., Kulaç A. A., TOKCAER KESKİN Z.
Turkish Journal of Biology, vol.46, no.5, pp.375-387, 2022 (SCI-Expanded)
- IV. Induced Pluripotent Stem Cells in Disease Modelling and Regeneration.
Talug B., Tokcaer-Keskin Z.
Advances in experimental medicine and biology, vol.1144, pp.91-99, 2019 (SCI-Expanded)
- V. Increased free Zn²⁺ correlates induction of sarco(endo)plasmic reticulum stress via altered expression levels of Zn²⁺-transporters in heart failure
OLĞAR Y., DURAK A., TUNCAY E., BİTİRİM C. V., ÖZÇİNAR E., İNAN M. B., TOKCAER KESKİN Z., AKÇALI K. C., AKAR A. R., Turan B.
JOURNAL OF CELLULAR AND MOLECULAR MEDICINE, vol.22, no.3, pp.1944-1956, 2018 (SCI-Expanded)
- VI. Comparative FAIRE-seq Analysis Reveals Distinguishing Features of the Chromatin Structure of Ground State- and Primed-Pluripotent Cells
Murtha M., Strino F., Tokcaer-Keskin Z., Bayin N. S., Shalabi D., Xi X., Kluger Y., Dailey L.
STEM CELLS, vol.33, no.2, pp.378-391, 2015 (SCI-Expanded)
- VII. FIREWACH: high-throughput functional detection of transcriptional regulatory modules in mammalian cells
Murtha M., Tokcaer-Keskin Z., Tang Z., Strino F., Chen X., Wang Y., Xi X., Basilico C., Brown S., Bonneau R., et al.
NATURE METHODS, vol.11, no.5, pp.559-565, 2014 (SCI-Expanded)
- VIII. The Effect of Estrogen on Bone Marrow-Derived Rat Mesenchymal Stem Cell Maintenance: Inhibiting Apoptosis Through the Expression of Bcl-x(L) and Bcl-2
Ayaloglu-Butun F., Terzioglu-Kara E., TOKCAER KESKİN Z., AKÇALI K. C.
STEM CELL REVIEWS AND REPORTS, vol.8, no.2, pp.393-401, 2012 (SCI-Expanded)
- IX. The Effect of Telomerase Template Antagonist GRN163L on Bone-Marrow-Derived Rat Mesenchymal Stem Cells is Reversible and Associated with Altered Expression of Cyclin d1, cdk4 and cdk6
TOKCAER KESKİN Z., DİKMEN Z. G., Ayaloglu-Butun F., Gultekin S., Gryaznov S. M., AKÇALI K. C.
STEM CELL REVIEWS AND REPORTS, vol.6, no.2, pp.224-233, 2010 (SCI-Expanded)
- X. Timing of induction of cardiomyocyte differentiation for in vitro cultured mesenchymal stem cells: a perspective for emergencies
Tokcaer-Keskin Z., AKAR A. R., Ayaloglu-Butun F., Terzioglu-Kara E., Durdu S., Ozyurda U., UĞUR M., Akcali K. C.
CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY, vol.87, no.2, pp.143-150, 2009 (SCI-Expanded)
- XI. Cloning and expression profile of FLT3 gene during progenitor cell-dependent liver regeneration
Aydin I. T., Tokcaer Z., Dalgic A., Konu O., Akcali K. C.
JOURNAL OF GASTROENTEROLOGY AND HEPATOLOGY, vol.22, no.12, pp.2181-2188, 2007 (SCI-Expanded)
- XII. Response surface optimization of antidipteran delta-endotoxin production by *Bacillus thuringiensis* subsp *israelensis* HD 500
Tokcaer Z., Bayraktar E., Mehmetoglu U., Ozcengiz G., Alaeddinoglu N.
PROCESS BIOCHEMISTRY, vol.41, no.2, pp.350-355, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. ADMINISTRATION OF BONE MARROW DERIVED MESENCHYMAL STEM CELLS MODULATE TLR

EXPRESSION DURING LIVER REGENERATION

Koçak H., Tokcaer Keskin Z., İnsal B., Gürsel İ., Akçalı K. C.

Trakya University Journal of Natural Sciences, vol.20, no.1, pp.1-10, 2019 (ESCI)

Books & Book Chapters

- I. **Genetic Identification of Human Embryonic Stem Cell-Derived Neural Cell Types Using Bacterial Artificial Chromosomes**
Tokcaer Keskin Z., Placantonakis D. G.
in: Stem Cells and Cancer Stem Cells, M. A. Hayat, Editor, Springer, London/Berlin , Dordrecht, pp.125-136, 2013
- II. **Mesenchymal Stem Cells: Possibilities of New Treatment Options**
Tokcaer Keskin Z., Koçak H., Gürsel İ., Akçalı K. C.
in: Adult and Embryonic Stem Cells, Kursad Turksen, Editor, Springer, London/Berlin , New-York, pp.59-67, 2012

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigating the effects of 5,10 methylenetetrahydrofolate reductase C677T polymorphism on differentiation of human mesenchymal stem cells**
VURAL R., ÇELİK D., PEKER E. B., KÖNİ E., KULAÇ A. A., TOKCAER KESKİN Z.
INTERNATIONAL SOCIETY FOR STEM CELL RESEARCH 2021 ANNUAL MEETING, VIRTUAL, United States Of America, 21 June 2021
- II. **Investigating the Effects of 5,10-Methylenetetrahydrofolate Reductase C677T Polymorphism on Mesenchymal Stem Cells by Using CRISPR/Cas9 System as a Gene Editing Tool**
Taluğ B., Deniz E., Tokcaer Keskin Z.
Organelle Biogenesis and Function in Cell physiology and in Disease conference, İstanbul, Turkey, 27 - 28 May 2019, pp.52
- III. **Investigating the Effects of 5,10-Methylenetetrahydrofolate Reductase C677T Polymorphism on Mesenchymal Stem Cells by Using CRISPR/Cas9 System as a Gene Editing Tool**
Taluğ B., Deniz E., Tokcaer Keskin Z.
International Molecular Medicine Symposium by the Bosphorus, İstanbul, Turkey, 16 - 18 May 2019, pp.74
- IV. **Investigating the Effects of 5,10-Methylenetetrahydrofolate Reductase C677T Polymorphism on Mesenchymal Stem Cells by Using CRISPR/Cas9 System as a Gene Editing Tool**
Taluğ B., Deniz E., Tokcaer Keskin Z.
Fifth International Congress of the Molecular Biology Association of Turkey, İstanbul, Turkey, 8 - 10 September 2017, pp.187
- V. **NO PATHWAY AND EPIGENETIC ALTERATIONS MAY BE NEW POSSIBLE TARGETS FOR METABOLIC SYNDROME**
Çiçek F., Tokcaer Keskin Z., Akçalı K. C., Turan B.
EUROPEAN SECTION MEETING OF THE INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES, Zalaegerszeg, Hungary, 08 October 2014, pp.1
- VI. **FLT3 MAY FUNCTION AS A LINK BETWEEN LIVER REGENERATION AND HEPATOCELLULAR CARCINOGENESIS**
Bayın N. S., Tokcaer Keskin Z., Acun T., Yakıcıer M. C., Akçalı K. C.
EASL SIGNALING IN THE LIVER, Amsterdam, Netherlands, 18 February 2010
- VII. **THE IN VITRO EFFECTS OF TELOMERASE INHIBITION ON BONE MARROW DERIVED RAT MESENCHYMAL STEM CELLS**
Tokcaer Keskin Z., Dikmen Z. G., Gryaznov S., Akçalı K. C.
INTERNATIONAL SOCIETY FOR STEM CELL RESEARCH 7TH ANNUAL MEETING, Barcelona, Spain, 08 July 2009, pp.7

- VIII. **Role of estrogen in mesenchymal stem cell biology**
AKÇALI K. C., AYALOĞLU BÜTÜN F., TOKCAER KESKİN Z.
INTERNATIONAL SOCIETY FOR STEM CELL RESEARCH 6TH ANNUAL MEETING, PHILADELPHIA, United States Of America, 11 June 2008
- IX. **The Effects of estrogen on the cell cycle regulators in mesenchymal stem cells**
TOKCAER KESKİN Z., AYALOĞLU BÜTÜN F., AKÇALI K. C.
Eurostemcell summer school 2007: Stem cells and Regenerative Medicine, HYDRA, Greece, 14 September 2007
- X. **Bacillus thuringiensis subspecies israelensis fermentasyonu için tepki yüzey optimizasyonu**
TOKCAER KESKİN Z., ÖZCENGİZ G., ALAEDDINOĞLU N.
13. Biyoteknoloji Kongresi, Çanakkale, Turkey, 25 August 2003

Supported Projects

Tokcaer Keskin Z., Turkey Institutes of Health Administration Project, Leptomeningeal Karsinomada artan SLPI ve CXCL17 gen ifadelerinin A549 hücre hattı üzerindeki etkilerinin araştırılması, 2022 - 2023

Güneşer M. B., Özdemir Ş., Altınova İ. S., Tokcaer Keskin Z., Project Supported by Higher Education Institutions, Kitosan Nanopartikülü Eklenmiş Mineral Trioksit Agregatin Fiziksel, Mekanik ve Sitotoksise Özelliklerinin Değerlendirilmesi, 2021 - 2022

İnan E. A., Tokcaer Keskin Z., Terzi O. S., TUBITAK Project, Linagliptin ve Empagliflozin tedavilerinin STZ diabetik sıçan kalbinde olası etkilerinin miRNA'lar üzerinden karşılaştırılmalı olarak değerlendirilmesi, 2019 - 2022

Tokcaer Keskin Z., TUBITAK Project, İnsan Mezenkimal Kök Hücrelerinde 5,10- Metilentetrahidrofolat Redüktaz C677T Polimorfizm Etkisinin Farklılaşma Üzerine Etkisinin İncelenmesi, 2019 - 2020

DENİZ E., Erman B., TOKCAER KESKİN Z., YAKICIER M. C., TUBITAK Project, Kanser Tedavilerinde Sitotoksik İlaçlara Karşı Gelişen Direnç Mekanizmalarının Crispr/Cas9 Teknolojisi Kullanılarak Genom Düzeyinde Taranması Ve Modellemenmesi, 2017 - 2020

Tokcaer Keskin Z., Tuncay E., TUBITAK Project, Zn²⁺-taşıyıcısı ZnT6'nın hücre iç serbest Zn²⁺ düzenlenmesindeki rolünün H9c2 hücrelerinde hiperglisemik koşullarda incelenmesi, 2018 - 2019

Tokcaer Keskin Z., Project Supported by Higher Education Institutions, İnsan Mezenkimal Kök Hücrelerinde CRISPR/Cas9 Genom Düzenleme Yönetimi ile 5,10-Metilentetrahidrofolat redüktaz C677T Polimorfizm Etkisinin Araştırılması, 2017 - 2018

Tokcaer Keskin Z., Project Supported by Higher Education Institutions, Kanagliflozinin İnsan Uyarılmış Pluripotent Kök Hücrelerinden Farklılaştırılan Kardiyomiyositler Kullanılarak İnsan Kardiyomiyositlerindeki Etkisinin Belirlenmesi, 2016 - 2017

Tokcaer Keskin Z., Project Supported by Higher Education Institutions, İnsan Uyarılmış Pluripotent Kök Hücrelerinden Limbal Epitel Kök Hücre Farklılaştırmasının Geliştirilerek Optimizasyonu, 2016 - 2017

Tokcaer Keskin Z., Turan B., TUBITAK Project, İndüklenmiş pluripotent kök hücrelerden farklılaştırılan kardiyomiyositlerde kimyasal ajanlar ve hipoksi ile oluşturulmuş hipertrofide β adrenerjik reseptörlerin rolü, 2014 - 2016

Akçalı K. C. , TUBITAK Project, KARACİĞER FİBROZİSİNDE FLT3 GENİNİN ETKİSİ VE BU ETKİNİN MOLEKÜLER MEKANİZMASI, 2012 - 2015

Akçalı K. C., TUBITAK Project, HİPOKSİNİN MEZENKİMAL KÖK HÜCRELERİ ÜZERİNDEKİ ETKİSİNDE ÖSTROJENİN ROLÜ VE ETKİ MEKANİZMASI, 2009 - 2010

Akçalı K. C., TUBITAK Project, ÖSTROJENİN DENYESEL HAYVAN MODELİ KULLANARAK MEZENKİMAL KÖK HÜCRE COĞALMASI, FARLILAŞMASI VE HASARLI DOKUYA ULAŞMASINDAKİ ROLÜNÜN TANIMLANMASI, 2006 - 2008

Activities in Scientific Journals

Acıbadem Üniversitesi Sağlık Bilimleri Dergisi, Assistant Editor/Section Editor, 2019 - Continues

Memberships / Tasks in Scientific Organizations

European Association for Cancer Research, Member, 2024 - Continues, England

Moleküler Kanser Araştırmaları Derneği, Member, 2023 - Continues, Turkey

Tıbbi Biyoloji ve Genetik Derneği, Member, 2019 - Continues, Turkey

Moleküler Biyoloji Derneği, Member, 2016 - Continues, Turkey

International Society of Stem Cell Research, Member, 2008 - 2022, United States Of America

Scientific Refereeing

SAGE Open Medicine, Journal Indexed in ESCI, March 2024

GENE, SCI Journal, September 2023

BALKAN MEDICAL JOURNAL, Journal Indexed in SCI-E, June 2023

BALKAN MEDICAL JOURNAL, Journal Indexed in SCI-E, February 2023

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Acibadem Mehmet Ali Aydinlar University, Turkey, June 2022

Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Acibadem Mehmet Ali Aydinlar University, Turkey, May 2022

Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Acibadem Mehmet Ali Aydinlar University, Turkey, April 2022

Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Acibadem Mehmet Ali Aydinlar University, Turkey, April 2022

Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Acibadem Mehmet Ali Aydinlar University, Turkey, March 2022

TUBITAK Project, 1002 - Quick Support Program, Acibadem Mehmet Ali Aydinlar University, Turkey, March 2022

Metrics

Publication: 37

Citation (WoS): 221

Citation (Scopus): 224

H-Index (WoS): 7

H-Index (Scopus): 7

Congress and Symposium Activities

Molecular Biology Association 2022, Moderator, İstanbul, Turkey, 2022

Türk Onkoloji Grubu çalıştayı, Attendee, İstanbul, Turkey, 2021

ISSCR 2021 , Attendee, Massachusetts, United States Of America, 2021

INTERNATIONAL SYMPOSIUM ON CELLULAR THERAPY IN CARDIOVASCULAR MEDICINE: STEM CELL OPPORTUNITY, Attendee, Ankara, Turkey, 2019

ISSCR 2015, Attendee, Stockholm, Sweden, 2015

IACS, Attendee, Budapest, Hungary, 2014

ISSCR 2009, Attendee, Barcelona, Spain, 2009

ISSCR 2008, Attendee, Pennsylvania, United States Of America, 2008

Eurostem cell 2007, Attendee, Athens, Greece, 2007

Awards

Tokcaer Keskin Z., Çiçek F., Akçalı K. C., Turan B., Poster Award, European Section Meeting Of The International Academy Of Cardiovascular Sciences, October 2014

Tokcaer Keskin Z., Dikmen Z. G., Akçalı K. C., Travel Award, International Society For Stem Cell Research, July 2009