

Asst. Prof. ZEYNEP TOKCAER KESKİN

Personal Information

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Education Information

Doctorate, Ihsan 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, Ihsan 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 Aydınlar University, Faculty Of Arts And Sciences, Molecular Biology And Genetics, 2015 - Continues

Research Assistant, Ankara University, Ankara Tıp Fakültesi, Ankara Tıp 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

Acibadem Mehmet Ali Aydınlar University, 2020 - Continues

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

Acibadem Mehmet Ali Aydınlar University, 2020 - 2021

Staj Koordinatörü, Acibadem Mehmet Ali Aydınlar University, Faculty Of Arts And Sciences, Molecular Biology And Genetics, 2018 - 2021

Birim Kalite Komisyonu Üyesi, Acibadem Mehmet Ali Aydınlar University, Faculty Of Arts And Sciences, Molecular Biology And Genetics, 2018 - 2021

Courses

Gelişim Biyolojisi, Undergraduate, 2015 - 2016, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022
Introduction to Molecular and Translational Biomedicine, Postgraduate, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022
Biyoteknoloji ve genetik mühendisliği, Undergraduate, 2016 - 2017, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2021 - 2022
Molecular and Cellular Biology 1, Undergraduate, 2021 - 2022
Research Techniques and Etics in Natural Sciences, Postgraduate, 2019 - 2020, 2020 - 2021, 2021 - 2022
Kök Hücre ve Hücreyel Tedaviler, Undergraduate, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022
Molecular and Translational Biomedicine, Postgraduate, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2021 - 2022
Genetics, Undergraduate, 2016 - 2017, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2020 - 2021
Stem Cells and Regenerative Applications, Postgraduate, 2017 - 2018, 2018 - 2019, 2019 - 2020
Biyokimya ve Genetik Araştırma Teknikleri, Undergraduate, 2015 - 2016
Genetik, Undergraduate, 2015 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **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 (Journal Indexed in SCI)
- II. **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. , ÖZÇINAR 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 (Journal Indexed in SCI)
- III. **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 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)
- V. **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 (Journal Indexed in SCI)
- VI. **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 (Journal Indexed in SCI)
- VII. **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 (Journal Indexed in SCI)
- VIII. **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 (Journal Indexed in SCI)

IX. 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 (Journal Indexed in SCI)

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 (Journal Indexed in 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**
Bayn N. S. , Tokcaer Keskin Z., Acun T., Yakicier 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., ALAEDDİNOĞLU 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 Agregatın Fiziksel, Mekanik ve Sitotoksikite Özelliklerinin Değerlendirilmesi, 2021 - 2022
- Tokcaer Keskin Z., Arioğlu İnan E., TUBITAK Project, Linagliptin ve Empagliflozin Tedavilerinin STZ-Diabetik Sıçan Kalbinde Olası Etkilerinin miRNA'lar Üzerinden Karşılaştırmalı Olarak Değerlendirilmesi, 2019 - 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 karşılaştırmalı 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
- TOKCAER KESKİN Z., TUBITAK Project, İnsan Mezenkimal Kök Hücrelerinde 5,10- Metilentetrahidrofolat Redüktaz C677T Polimorfizm Etkisinin Farklılaşma Üzerine Etkisinin İncelenmesi, 2019 - 2020
- DENİZ E., YAKICIER M. C. , TOKCAER KESKİN Z., Erman B., TUBITAK Project, Kansere Tedavilerinde Sitotoksik İlaçlara Karşı Gelişen Direnç Mekanizmalarının Crispr/Cas9 Teknolojisi Kullanılarak Genom Düzeyinde Taranması Ve Modellenmesi, 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 Kardiyomyositler Kullanılarak İnsan Kardiyomyositlerindeki Etkisinin Belirlenmesi, 2016 - 2017
- Tokcaer Keskin Z., Project Supported by Higher Education Institutions, İnsan Uyarılmış Pluripotent Kök Hücrelerinden Limbal Epitel Kök Hücre Farklılaştırılmasının Geliştirilerek Optimizasyonu, 2016 - 2017
- Tokcaer Keskin Z., Turan B., TUBITAK Project, İndüklenmiş pluripotent kök hücrelerden farklılaştırılan kardiyomyositlerde kimyasal ajanlar ve hipoksi ile oluşturulan hipertrofiye β adrenerjik reseptörlerin rolü, 2014 - 2016

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

Edit Congress and Symposium Activities

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

Türk Onkoloji Grubu çalıştay, 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

Citations

Total Citations (WOS):191

h-index (WOS):7

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