

# Prof. KAMİL CAN AKÇALI

## Personal Information

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## International Researcher IDs

ORCID: 0000-0002-7816-6938

Publons / Web Of Science ResearcherID: W-1364-2017

ScopusID: 6602946467

Yoksis Researcher ID: 28731

## Education Information

Doctorate, University of Cincinnati, United States Of America 1992 - 1998

Undergraduate, Ankara University, Ankara Tıp Fakültesi, Ankara Tıp Pr., Turkey 1981 - 1987

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, The Involvement of Bcl-2 Family Genes During Decidualization in vivo and in vitro, University of Cincinnati, 1998

## Research Areas

Medicine, Health Sciences, Natural Sciences

## Academic Titles / Tasks

Professor, Ankara University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2013 - Continues

Assistant Professor, Ihsan Dogramaci Bilkent University, Faculty Of Science, Department Of Molecular Biology And Genetics, 1998 - 2013

## Academic and Administrative Experience

Director of The Institution, Ankara University, Kök Hücre Enstitüsü, Kök Hücre ve Yenileyici Tıp Anabilim Dalı, 2022 - Continues

Ankara University, 2019 - Continues

## Courses

### Doctorate

Alan Uygulaması, Doctorate, 2015 - 2016  
Seminer, Doctorate, 2015 - 2016  
Uzmanlık Alan Dersi, Doctorate, 2015 - 2016  
Moleküler Biyolojik Yöntemler, Doctorate, 2015 - 2016

### Postgraduate

Genel Biyofizik, Postgraduate, 2015 - 2016  
Dolaşım Sistemi biyofiziği, Postgraduate, 2015 - 2016  
İnsan Biyolojisi, Postgraduate, 2015 - 2016  
İnsan Fizyolojisi, Postgraduate, 2015 - 2016  
Tıpta Bilimsel Araştırmaların Yeri ve Önemi, Postgraduate, 2013 - 2014  
Advanced Developmental Biology, Postgraduate, 2012 - 2013, 2008 - 2009, 2004 - 2005  
STEM CELL BIOLOGY, Postgraduate, 2009 - 2010, 2007 - 2008, 2005 - 2006  
MBG-502 ADVANCED CELLULAR BIOLOGY, Postgraduate, 2007 - 2008, 2006 - 2007, 2003 - 2004

### Undergraduate

Biyofizik (Diş Hekimliği), Undergraduate, 2015 - 2016  
Biyofizik (tıp), Undergraduate, 2015 - 2016  
Biyofizik, Undergraduate, 2013 - 2014  
Tıpta Bilimsel Araştırmaların Yeri ve Önemi, Undergraduate, 2013 - 2014  
Stem Cell Biology, Undergraduate, 2012 - 2013  
Developmental Biology, Undergraduate, 2012 - 2013, 2010 - 2011, 2009 - 2010, 2004 - 2005  
MBG-316 Physiology, Undergraduate, 2011 - 2012, 2009 - 2010  
MBG-102 BIOLOGY II, Undergraduate, 2011 - 2012, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002  
INTRODUCTION TO MODERN BIOLOGY, Undergraduate, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
Introduction to Stem Cell Biology , Undergraduate, 2007 - 2008  
MBG-105 Principles of Biology , Undergraduate, 2004 - 2005  
MBG-101 Biology , Undergraduate, 2003 - 2004, 2002 - 2003, 2000 - 2001  
MBG-487 Special Techniques in Molecular Genetics , Undergraduate, 2002 - 2003  
MBG-104 Introduction to Molecular Biology, Undergraduate, 2002 - 2003

## Supervised Theses

Akçalı K. C., Generation of patient specific iPSC-derived healthy organoids from primary colorectal cancer patients with/without metastasis and transcriptome analysis, Doctorate, Z.BÜŞRA(Student), 2023  
Akçalı K. C., Dental kök hücrelerin kemiğe farklılaşmasında mikrobiyota ürünlerinin rolü, Postgraduate, M.HABİP(Student), 2023  
Akçalı K. C., Erkek Germline Kök Hücre-Benzeri Hücrelerin Olgun Sperme In Vitro Farklılaşması ve In Vivo Spermatogenez Restorasyonuna Etkisi, Postgraduate, D.AYDOS(Student), 2023  
Akçalı K. C., İnsan kemik iliği kaynaklı-mezenkimal kök hücre eksozomlarının kolorektal kanser (KRK) hücre hatları üzerindeki etkisinin araştırılması, Doctorate, Ö.COŞKUN(Student), 2022  
Akçalı K. C., Ticagrelor ile muamele edilen mezenkimal kök hücrelerden elde edilen eksozomların hücre göçü ve yara iyileşmesi üzerindeki etkisi, Postgraduate, E.GÖKSOY(Student), 2022  
Akçalı K. C., Karaciğer kanser kök hücre belirteçlerini tek hücre RNA dizilimi (SCRNA-SEQ) analizi ile saptama, Postgraduate, E.KOCAKAYA(Student), 2022  
Akçalı K. C., İndüklenmiş pluripotent kök hücre eldesinde çinkonun rolü, Postgraduate, K.GENÇ(Student), 2022  
AKÇALI K. C., Çinkonun karaciğer fibrozu üzerindeki genetik ve epigenetik etkisi, Postgraduate, Z.BÜŞRA(Student), 2019  
AKÇALI K. C., Safran'ın parsiyal hepatektomi sonrası karaciğer rejenerasyonuna etkisinin PI3K/Akt/mTOR sinyal yolağı

üzerinden belirlenmesi, Postgraduate, B.BERBER(Student), 2017  
AKÇALI K. C., The use of nanoparticle labeling in cellular tracking, Doctorate, E.AKHAN(Student), 2015  
AKÇALI K. C., Karaciğer fibrozisi ve kanserinin ilerlemesini engelleyici terapötik yaklaşımlar, Doctorate, M.MERVE(Student), 2015  
AKÇALI K. C., Genetic and epigenetic effect of estrogen on mesenchymal stem cell maintenance and differentiation, Doctorate, C.VERDA(Student), 2013  
AKÇALI K. C., Applications of biomaterials in cancer diagnosis and treatment, Postgraduate, D.GÖZEN(Student), 2013  
AKÇALI K. C., Characterization of novel monoclonal antibodies that target proteins differentially expressed in hepatocellular carcinoma: A proteomics approach, Doctorate, E.ÖZTAŞ(Student), 2011  
AKÇALI K. C., Role of estrogen on the maintenance and homing capacity of bone marrow derived rat mesenchymal stem cells, Doctorate, F.AYALOĞLU(Student), 2011  
AKÇALI K. C., The role of FLT3 in hepatocellular carcinogenesis, Postgraduate, N.SUMRU(Student), 2010  
AKÇALI K. C., Contribution of mesenchymal stem cells in cell based therapies, Doctorate, Z.TOKCAER(Student), 2010  
AKÇALI K. C., Role of environmental factors in mesenchymal stem cell biology, Postgraduate, S.GÜLTEKİN(Student), 2009  
AKÇALI K. C., Liver regeneration: Potential roles of mesenchymal stem cells and toll like receptors, Postgraduate, H.KOÇAK(Student), 2008  
AKÇALI K. C., WNT/beta-catenin signaling pathway activation in epithelial cancers, Doctorate, K.BENHAJ(Student), 2006  
AKÇALI K. C., Effect of estrogen on apoptotic regulatory mechanisms in mesenchymal stem cell maintenance, Postgraduate, E.TERZİOĞLU(Student), 2006

## Jury Memberships

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Ankara Üniversitesi, November, 2024  
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Ankara Üniversitesi, October, 2024  
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Ege Üniversitesi, October, 2024  
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Ege Üniversitesi, October, 2024  
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Ankara Üniversitesi, July, 2023  
Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Ankara Üniversitesi, June, 2023

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The Role of Zinc on Liver Fibrosis by Modulating ZIP14 Expression Throughout Epigenetic Regulatory Mechanisms**  
Aksoy-Ozer Z. B., BİTİRİM C. V., TURAN B., AKÇALI K. C.  
BIOLOGICAL TRACE ELEMENT RESEARCH, vol.202, no.11, pp.5094-5105, 2024 (SCI-Expanded)
- II. **Cardioprotective role of a magnolol and honokiol complex in the prevention of doxorubicin-mediated cardiotoxicity in adult rats**  
Aktay I., BİTİRİM C. V., OLĞAR Y., DURAK A., TUNCA Y., BİLLUR D., AKÇALI K. C., TURAN B.  
Molecular and Cellular Biochemistry, vol.479, no.2, pp.337-350, 2024 (SCI-Expanded)
- III. **Microbiota-Derived Postbiotics Enhance the Proliferative Effects of Growth Factors on Satellite Cells in Cultivated Meat Applications**  
Celebi-Birand D., Genc K., Agun I., Erikci E., Akcali K. C., Kiran F.  
SUSTAINABILITY, no.23, 2023 (SCI-Expanded)

- IV. **Coffee-Derived Exosome-Like Nanoparticles: Are They the Secret Heroes?**  
Kantarcioğlu M., Yıldırım G., Akpınar Oktar P., Yanbakan S., Özer Z. B., Yurtsever Sarıca D., Taşdelen S., Bayrak E., Akın Balı D. F., ÖZTÜRK S., et al.  
TURKISH JOURNAL OF GASTROENTEROLOGY, vol.34, no.2, pp.78-86, 2023 (SCI-Expanded)
- V. **Cardioprotective effect of extracellular vesicles derived from ticagrelor-pretreated cardiomyocyte on hyperglycemic cardiomyocytes through alleviation of oxidative and endoplasmic reticulum stress**  
BİTİRİM C. V., ÖZER H. B., Aydos D., Genc K., Demirsoy S., AKÇALI K. C., TURAN B.  
Scientific Reports, vol.12, no.1, 2022 (SCI-Expanded)
- VI. **Estrogen receptor alpha regulates the expression of adipogenic genes genetically and epigenetically in rat bone marrow-derived mesenchymal stem cells**  
V. Bitirim C. V., Ozer Z. B., AKÇALI K. C.  
PEERJ, 2021 (SCI-Expanded)
- VII. **2D MXenes with antiviral and immunomodulatory properties: A pilot study against SARS-CoV-2**  
ÜNAL M. A., Bayrakdar F., Fusco L., Besbinar O., Shuck C. E., Yalcin S., TÜRKTAŞ ERKEN M., ÖZKUL A., Gurcan C., PANATLI O., et al.  
NANO TODAY, vol.38, 2021 (SCI-Expanded)
- VIII. **Graphene Oxide Nanosheets Interact and Interfere with SARS-CoV-2 Surface Proteins and Cell Receptors to Inhibit Infectivity**  
ÜNAL M. A., Bayrakdar F., NAZIR H., Besbinar O., Gurcan C., Lozano N., Arellano L. M., Yalcin S., PANATLI O., Celik D., et al.  
SMALL, vol.17, no.25, 2021 (SCI-Expanded)
- IX. **Generation and characterization of human induced pluripotent stem cell line METUi001-A from a 25-year-old male patient with relapsing-remitting multiple sclerosis**  
BEGENTAŞ O. C., Koc D., Yurtogullari S., Temel M., AKÇALI K. C., Demirkaya S., KİRİŞ E.  
STEM CELL RESEARCH, vol.53, 2021 (SCI-Expanded)
- X. **Ribavirin shows antiviral activity against SARS-CoV-2 and downregulates the activity of TMPRSS2 and the expression of ACE2 in vitro**  
ÜNAL M. A., BİTİRİM C. V., Summak G. Y., BEREKETOĞLU NERGİS S., Zeytin I. C., Besbinar O., Gurcan C., Aydos D., Goksoy E., Kocakaya E., et al.  
CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY, no.5, pp.449-460, 2021 (SCI-Expanded)
- XI. **Human Gut Commensal Membrane Vesicles Modulate Inflammation by Generating M2-like Macrophages and Myeloid-Derived Suppressor Cells**  
Bulut E. A., Kocabas B. B., Yazar V., Aykut G., GÜLER Ü., SALİH B., Yilmaz N. S., AYANOĞLU İ. C., Polat M. M., AKÇALI K. C., et al.  
JOURNAL OF IMMUNOLOGY, vol.205, no.10, pp.2707-2718, 2020 (SCI-Expanded)
- XII. **Differential expression of genes participating in cardiomyocyte electrophysiological remodeling via membrane ionic mechanisms and Ca<sup>2+</sup>-handling in human heart failure**  
Kepenek E. S., ÖZÇINAR E., TUNCAY E., AKÇALI K. C., AKAR A. R., Turan B.  
MOLECULAR AND CELLULAR BIOCHEMISTRY, vol.463, no.1-2, pp.33-44, 2020 (SCI-Expanded)
- XIII. **A CD34+ Cell Enrichment Protocol of Hematopoietic Stem Cells in a Well-Established Quality Management System**  
Kılıç P., Bay M., Yildirim Y., Coskun Ö., Seker Ş., Baydın P., Ulker O. L., Parmaksız M., Çubukçuoğlu Deniz G., Yilmazer Aktuna A., et al.  
CELLS TISSUES ORGANS, vol.207, no.1, pp.15-20, 2019 (SCI-Expanded)
- XIV. **Increased free Zn<sup>2+</sup> correlates induction of sarco(endo)plasmic reticulum stress via altered expression levels of Zn<sup>2+</sup>-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 (SCI-Expanded)
- XV. **Age-and sex-dependent alteration of functions and epigenetic modifications of vessel and endothelium related biomarkers**

HAN S., Aydin M. M., Akansel S., Usanmaz S. E., Akcali C., ULUDAĞ M. O., Yilmaz E.

Turkish Journal of Biology, vol.42, no.4, pp.286-296, 2018 (SCI-Expanded)

- XVI. **Liver fibrosis**  
Aydin M. M., AKÇALI K. C.  
TURKISH JOURNAL OF GASTROENTEROLOGY, vol.29, no.1, pp.14-21, 2018 (SCI-Expanded)
- XVII. **Role of FLT3 in the proliferation and aggressiveness of hepatocellular carcinoma**  
Aydin M. M., Bayin N. S., ACUN T., Yakicier M. C., AKÇALI K. C.  
TURKISH JOURNAL OF MEDICAL SCIENCES, vol.46, no.2, pp.572-581, 2016 (SCI-Expanded)
- XVIII. **A new tool for differentiating hepatocellular cancer cells: Patterned carbon nanotube arrays**  
Kucukayan-Dogu G., Gozen D., Bitirim V., AKÇALI K. C., BENGÜ E.  
APPLIED SURFACE SCIENCE, vol.351, pp.27-32, 2015 (SCI-Expanded)
- XIX. **Nanoparticle Labeling of Bone Marrow-Derived Rat Mesenchymal Stem Cells: Their Use in Differentiation and Tracking**  
Akhan E., TUNCEL D., AKÇALI K. C.  
BIOMED RESEARCH INTERNATIONAL, vol.2015, 2015 (SCI-Expanded)
- XX. **Resveratrol affects histone 3 lysine 27 methylation of vessels and blood biomarkers in DOCA salt-induced hypertension**  
HAN S., ULUDAĞ M. O., Usanmaz S. E., Ayaloglu-Butun F., AKÇALI K. C., DEMİREL YILMAZ E.  
MOLECULAR BIOLOGY REPORTS, vol.42, no.1, pp.35-42, 2015 (SCI-Expanded)
- XXI. **Examination of fabrication conditions of acrylate-based hydrogel formulations for doxorubicin release and efficacy test for hepatocellular carcinoma cell**  
BAYRAMOĞLU G., Gozen D., Ersoy G., Ozalp V. C., AKÇALI K. C., Arica M. Y.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.25, no.7, pp.657-678, 2014 (SCI-Expanded)
- XXII. **Patterned carbon nanotubes as a new three-dimensional scaffold for mesenchymal stem cells**  
BİTİRİM C. V., Kucukayan-Dogu G., BENGÜ E., AKÇALI K. C.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.33, no.5, pp.3054-3060, 2013 (SCI-Expanded)
- XXIII. **Imetelstat (a telomerase antagonist) exerts off-target effects on the cytoskeleton**  
Mender I., ŞENTÜRK Ş., Ozgunes N., AKÇALI K. C., Kletsas D., Gryaznov S., CAN A., Shay J. W., DİKMEN Z. G.  
INTERNATIONAL JOURNAL OF ONCOLOGY, vol.42, no.5, pp.1709-1715, 2013 (SCI-Expanded)
- XXIV. **Poly (hydroxyethyl methacrylate-glycidyl methacrylate) films modified with different functional groups: In vitro interactions with platelets and rat stem cells**  
BAYRAMOĞLU G., Bitirim V., TUNALI Y., Arica M. Y., AKÇALI K. C.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.33, no.2, pp.801-810, 2013 (SCI-Expanded)
- XXV. **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)
- XXVI. **Apoptotic Vascular Smooth Muscle Cell Depletion via BCL2 Family of Proteins in Human Ascending Aortic Aneurysm and Dissection**  
Durdu S., ÇUBUKÇUOĞLU DENİZ G., BALCI D., Zaim C., Dogan A., CAN A., AKÇALI K. C., AKAR A. R.  
CARDIOVASCULAR THERAPEUTICS, vol.30, no.6, pp.308-316, 2012 (SCI-Expanded)
- XXVII. **Mammalian Telomeric DNA Suppresses Endotoxin-induced Uveitis**  
Yagci F. C., Aslan O., GÜRSEL M., Tincer G., Ozdamar Y., Karatepe K., AKÇALI K. C., GÜRSEL İ.  
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.285, no.37, pp.28806-28811, 2010 (SCI-Expanded)
- XXVIII. **Transforming Growth Factor-Beta Induces Senescence in Hepatocellular Carcinoma Cells and Inhibits Tumor Growth**  
ŞENTÜRK Ş., Mumcuoglu M., Gursoy-Yuzugullu O., Cingoz B., AKÇALI K. C., Ozturk M.  
HEPATOLOGY, vol.52, no.3, pp.966-974, 2010 (SCI-Expanded)
- XXIX. **Expression levels of TRPC1 and TRPC6 ion channels are reciprocally altered in aging rat aorta:**

**implications for age-related vasospastic disorders**

ERAÇ Y., SELLİ KARAKAYA Ç., KOSOVA B., AKÇALI K. C., Tosun M.

AGE, vol.32, no.2, pp.223-230, 2010 (SCI-Expanded)

- XXX. **The Ability to Generate Senescent Progeny as a Mechanism Underlying Breast Cancer Cell Heterogeneity**  
Mumcuoglu M., Bagislar S., Yuzugullu H., Alotaibi H., ŞENTÜRK Ş., TELKOPARAN AKILLILAR P., Gur-Dedeoglu B., Cingoz B., Bozkurt B., Tazebay U. H., et al.  
PLOS ONE, vol.5, no.6, 2010 (SCI-Expanded)
- XXXI. **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)
- XXXII. **Canonical Wnt signaling is antagonized by noncanonical Wnt5a in hepatocellular carcinoma cells**  
Yuzugullu H., Benhaj K., Ozturk N., ŞENTÜRK Ş., Celik E., TOYLU A., Tasdemir N., Yilmaz M., Erdal E., AKÇALI K. C., et al.  
MOLECULAR CANCER, vol.8, 2009 (SCI-Expanded)
- XXXIII. **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., AKÇALI K. C.  
CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY, vol.87, no.2, pp.143-150, 2009 (SCI-Expanded)
- XXXIV. **Failing heart; remodel, replace or repair?**  
AKAR A. R., Durdu S., ÇUBUKÇUOĞLU DENİZ G., Aslan A., AKÇALI K. C., Ozyurda U.  
ANATOLIAN JOURNAL OF CARDIOLOGY, vol.8, pp.148-157, 2008 (SCI-Expanded)
- XXXV. **Alternatively spliced Robo2 isoforms in zebrafish and rat**  
Dalkic E., Kuscu C., Sucularli C., Aydin I. T., AKÇALI K. C., Konu O.  
DEVELOPMENT GENES AND EVOLUTION, vol.216, no.9, pp.555-563, 2006 (SCI-Expanded)
- XXXVI. **Redundant expression of canonical Wnt ligands in human breast cancer cell lines**  
Benhaj K., AKÇALI K. C., Ozturk M.  
ONCOLOGY REPORTS, vol.15, no.3, pp.701-707, 2006 (SCI-Expanded)
- XXXVII. **Reprogramming of replicative senescence in hepatocellular carcinoma-derived cells**  
Ozturk N., Erdal E., Mumcuoglu M., AKÇALI K. C., Yalcin O., ŞENTÜRK Ş., Arslan-Ergul A., Gur B., Yulug I., Cetin-Atalay R., et al.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.103, no.7, pp.2178-2183, 2006 (SCI-Expanded)
- XXXVIII. **The role of bcl-2 family of genes during kindling**  
AKÇALI K. C., Sahiner M., Sahiner T.  
EPILEPSIA, vol.46, no.2, pp.217-223, 2005 (SCI-Expanded)
- XXXIX. **Expression of bcl-2 gene family during resection induced liver regeneration: Comparison between hepatectomized and sham groups**  
AKÇALI K. C., Dalgic A., Ucar A., Ben Haj K., Guvenc D.  
WORLD JOURNAL OF GASTROENTEROLOGY, vol.10, no.2, pp.279-283, 2004 (SCI-Expanded)
- XL. **The involvement of apoptotic regulators during in vitro decidualization**  
AKÇALI K. C., Gibori G., Khan S.  
EUROPEAN JOURNAL OF ENDOCRINOLOGY, vol.149, no.1, pp.69-75, 2003 (SCI-Expanded)
- XLI. **Participation of the melanocortin-1 receptor in the UV control of pigmentation**  
Suzuki I., Im S., Tada A., Scott C., AKÇALI K. C., Davis M., Barsh G., Hearing V., Abdel-Malek Z.  
JOURNAL OF INVESTIGATIVE DERMATOLOGY SYMPOSIUM PROCEEDINGS, vol.4, no.1, pp.29-34, 1999 (SCI-Expanded)
- XLII. **The melanocortin-1 receptor and human pigmentation**  
Abdel-Malek Z., Suzuki I., Tada A., Im S., AKÇALI K. C.  
CUTANEOUS NEUROIMMUNOMODULATION: THE PROOPIOMELANOCORTIN SYSTEM, vol.885, pp.117-133, 1999

(SCI-Expanded)

- XLIII. **Progesterone withdrawal and RU-486 treatment stimulate apoptosis in specific uterine decidual cells**  
Moulton B., Motz J., Serdoncillo C., AKÇALI K. C., Khan S.  
CELL DEATH AND DIFFERENTIATION, vol.4, no.1, pp.76-81, 1997 (SCI-Expanded)
- XLIV. **Effect of decidualization on the expression of bax and bcl-2 in the rat uterine endometrium**  
AKÇALI K. C., Khan S., Moulton B.  
ENDOCRINOLOGY, vol.137, no.7, pp.3123-3130, 1996 (SCI-Expanded)
- XLV. **MITOGENIC AND MELANOGENIC STIMULATION OF NORMAL HUMAN MELANOCYTES BY MELANOTROPIC PEPTIDES**  
ABDELMALEK Z., SWOPE V., SUZUKI I., AKÇALI K. C., HARRIGER M., BOYCE S., URABE K., HEARING V.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.92, no.5, pp.1789-1793, 1995 (SCI-Expanded)
- XLVI. **HORMONAL-REGULATION AND EXPRESSION OF THE JUN-D PROTOONCOGENE IN SPECIFIC CELL-TYPES OF THE RAT UTERUS**  
NEPHEW K., WEBB D., AKÇALI K. C., MOULTON B., KHAN S.  
JOURNAL OF STEROID BIOCHEMISTRY AND MOLECULAR BIOLOGY, vol.46, no.3, pp.281-287, 1993 (SCI-Expanded)

### Articles Published in Other Journals

- I. **A Three-Step Protocol to Differentiate iPSC into Colon Organoids.**  
Aksoy Z. B., Akcali K. C.  
Methods in molecular biology (Clifton, N.J.), vol.2835, pp.59-67, 2024 (Scopus)
- II. **An Enzyme-Free Method for Isolation and Expansion of Muscle Stem Cells for Cultivated Meat Applications.**  
Genc K., Celebi-Birand D., Akcali K. C.  
Methods in molecular biology (Clifton, N.J.), vol.2835, pp.249-259, 2024 (Scopus)
- III. **Generation of Induced Pluripotent Stem Cells from Erythroid Progenitor Cells.**  
Aksoy Z. B., Akcali K. C.  
Methods in molecular biology (Clifton, N.J.), vol.2835, pp.99-110, 2024 (Scopus)
- IV. **ANTIVIRAL ACTIVITY OF BETA FERON FOR COVID-19 BETA FERON'UN COVID-19 İÇİN ANTİVİRAL AKTİVİTESİ**  
Bayrakdar F., ÖZKAN S. A., AKÇALI K. C.  
Ankara Üniversitesi Eczacılık Fakültesi Dergisi, vol.46, no.3, pp.883-895, 2022 (Scopus)
- V. **Beneficial Effect of a Mitochondrial-targeted Antioxidant Mitotempo in Insulin-resistant Mammalian Cardiac Dysfunction**  
Bitirim C. V., Olğar Y., Billur D., Akçalı K. C., Turan B.  
Ankara Üniversitesi Tıp Fakültesi Mecmuası, vol.74, no.2, pp.252-258, 2021 (Peer-Reviewed Journal)
- VI. **Administration of bone marrow derived mesenchymal stem cells modulate TLR expression during liver regeneration**  
KOÇAK H., TOKCAER KESKİN Z., İNSAL B., GÜRSEL İ., AKÇALI K. C.  
Trakya University Journal of Natural Sciences, vol.20, pp.1-10, 2019 (Peer-Reviewed Journal)

### Papers Published in Refereed Scientific Meetings

- I. **Effects of BIFTEK supplement on the growth of bovine muscle satellite cells**  
Gölpek S., Kiran F., Akçalı K. C.  
International Scientific Conference on Cultured Meat, Maastricht, Netherlands, 17 - 19 November 2024, pp.1
- II. **Electrospinning of novel nanofibrous scaffolds for cultivated meat production**  
Gölpek S., Kiran F., Akçalı K. C.

- International Scientific Conference on Cultured Meat, Maastricht, Netherlands, 17 - 19 November 2024, pp.1
- III. **Generation of Functional Gametes from Unipotent Male Germline Stem Cells Through Germline-Derived Pluripotent Stem Cells: New Hope for Male Infertility**  
Aydos D., Aydos O. S., Aydos K., Akçalı K. C.  
International Society of Stem Cell Research (ISSCR) 2023 Annual Meeting, Massachusetts, United States Of America, 14 June 2023
- IV. **Human BM-MSX Exosomes Promotes Cell Proliferation, Migration and Invasion in Human Colorectal Cancer**  
Coşkun Ö., Aydos D., Akçalı K. C.  
International Congress of Health Research , Ankara, Turkey, 08 December 2022 - 09 December 2023, pp.31-32
- V. **Gizli Kahraman Deşifre Oldu: Kahve Eksozomları!**  
KANTARCIOĞLU M., YILDIRIM G., AKPINAR OKTAR P., YANBAKAN S., ÖZER Z. B., SARICA D., taşdelen s., BAYRAK E., BALI D. F., ÖZTÜRK S., et al.  
GASTROENTOLOJİ CERRAHİSİ KONGRESİ, Antalya, Turkey, 16 November 2021
- VI. **Determination of the Effect of Saffron on Liver Regeneration After Partial Hepatectomy via PI3K/AKT/mTOR Signal Pathway**  
BERBER B., CANBEK M., AKÇALI K. C., CEYHAN E., ÖZMEN YAYLACI A., Resulzade L.  
EUSTM-20175th Annual European Congress on Clinical Translational Sciences, Berlin, Germany, 20 October - 22 December 2017, vol.4, pp.27
- VII. **Role of Zinc Transporters in Mammalian Heart under Physiological and Pathological Conditions**  
TOY A., OLĞAR Y., TUNCA Y., BİTİRİM V. C., ÖZÇINAR E., İNAN M. B., AKÇALI K. C., ÖZDEMİR S., AKAR A. R., TURAN B.  
Biophysical Society 61st Annual Meeting, NEW ORLEANS, United States Of America, 11 - 15 February 2017, vol.112, pp.538
- VIII. **Role of Zinc Transporters in Mammalian Heart under Physiological and Pathological Conditions**  
DURAK A., OLĞAR Y., TUNCA Y., BİTİRİM C. V., ÖZÇINAR E., İNAN M. B., AKÇALI K. C., ÖZDEMİR S., AKAR A. R., Turan B.  
58th Annual Meeting of the Biophysical-Society, San-Francisco, Costa Rica, 15 - 19 February 2014, vol.112
- IX. **Klinik Bilimler ve Temel Bilimlerde Ortak Çalışma Oluşturmanın Önemi**  
AKÇALI K. C.  
12. Ulusal Onkoloji Çalıştayı, Turkey, 26 - 30 October 2016
- X. **Effect of Epigenetic Alterations on the Differentiation Potential of Dental Pulp Stem Cells**  
Akhan E., ERKUT S., YILDIRIM S., AKÇALI K. C.  
Bangkok International Conference on Biological Engineering And Natural Science, 26 - 28 February 2015
- XI. **Effect of estrogen on epigenetic and genetic regulation of adipogenesis of mesenchymal stem cells**  
BİTİRİM C. V., AKÇALI K. C.  
EMBO Conference series- Chromatin and epigenetics, Heidelberg, Germany, 08 May 2013
- XII. **EFFECT OF ESTROGEN ON THE DIFFERENTIATION OF BONE MARROW DERIVED RAT MESENCHYMAL STEM CELLS INTO ADIPOCYTES AND OSTEOCYTES**  
BİTİRİM C. V., Ayaloğlu-Bütün F., AKÇALI K. C.  
ISSCR- International Society of Stem Cell Research, Toronto, Canada, 15 June 2011, pp.137-138
- XIII. **Involvement of Bcl-2 family of proteins in vascular smooth muscle cell apoptosis in patients with ascending aortic aneurysm and dissection.**  
DURDU M. S., ÇUBUKÇUOĞLU DENİZ G., ZAİM Ç., BALCI D., CAN A., AKÇALI K. C., AKAR A. R.  
NACD 2011, International Symposium on new approaches in cardiovascular disorders From Genes Molecules to Clinical Applications, Ankara, Turkey, May 4-8, 2011., 04 May 2011

## Supported Projects

Akçalı K. C., Yılmaz Aktuna A., Ünal M. A., Bitirim C. V., Kiran F., Kaya B., Oto Ç., Kiliç P., Özkan S. A., Kıyan Z., et al.,



TUBITAK Project, Regenerative and Restorative Medicine Research and Practice, 2021 - 2025

Kıran F., Akçalı K. C., TUBITAK Project, Rejeneratif ve Restoratif Tıp Araştırmaları ve Uygulamaları: Mikrobiyota Kaynaklı Post-biyotik Mediatör Destekli İnsan Epidermal Doku Eşdeğerinin Vücut Dışında Üretilmesi: Rejeneratif Tıp Uygulamaları için Yeni Bir Doku Mühendisliği Ürünü, 2021 - 2025

Kıran F., Akçalı K. C., Kırgan J., Other International Funding Programs, Kansere ve küresel omiks teknolojilerinin entegrasyonu: Kansere dirençli kör köstebek faresi bağırsak mikrobiyotasından izole edilen *Ligilactobacillus animalis* EIR/SpX-1 suşunun anti-kanser mekanizmasının belirlenmesi, 2023 - 2024

Fidan Ç., Devrim E., Akçalı K. C., Project Supported by Higher Education Institutions, Gallik Asidin Deneysel Kolon Kanseri Oluşturulan Ratlarda Lipid Metabolizması ve Oksidatif Stres Üzerine Etkileri, 2022 - 2024

Kıran F., Akçalı K. C., Project Supported by Other Official Institutions, Mikrobiyota kaynaklı biyoaktif postbiyotiklerin aşı adjuvanı olarak kullanım potansiyellerinin belirlenmesi, 2022 - 2024

Akçalı K. C., Özdağ Sevgili H., Ceylaner S., Industrial Thesis Project, Kolorektal Kansere Yönelik Kişiyeye Özgün Prognostik Biyobelirteç Potansiyeli Taşıyan Panel Geliştirilmesi, 2021 - 2024

Akçalı K. C., Bitirim C. V., Ekim O., TUBITAK Project, Östrojenin Kardiyak Progenitör Hücre Farklılaşması Üzerindeki Rolünün in vivo ve in vitro İncelenmesi, 2021 - 2024

Yılmaz Aktuna A., Akçalı K. C., Bitirim C. V., Özkan S. A., Ünal M. A., TUBITAK Project, Ülkemizde ve Dünyada Halk Sağlığını En Fazla Tehdit Eden HIV, HPV ve Influenza Kaynaklı Enfeksiyonlara Karşı Tanı Kitleri, İlaç Formülasyonları ve Aşı Geliştirilmesi (TUBITAK-18AG020), 2020 - 2024

Akçalı K. C., Yılmaz Aktuna A., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Kök Hücre Araştırma Merkezi, 2017 - 2024

Aydın S., Billur D., Gökçe G., Yazır Y., Akçalı K. C., Project Supported by Higher Education Institutions, Deneysel Alzheimer Modelinde Farklı Kaynaklardan Elde Edilen Eksozom Uygulamasının mTOR-AKT-HIF 1alpha Yolağı Üzerindeki Etkisi ve TRP Kanalları İle İlişkinin Histopatolojik Olarak Değerlendirilmesi, 2022 - 2023

Akçalı K. C., TUBITAK Project, Omurilik Yaralanmalarında Ependimal Ve Mezenkimal Kök Hücre Kaynaklı Eksozomların Karşılaştırılması: Deneysel Çalışma, 2021 - 2023

Akçalı K. C., Bucak M. N., TUBITAK Project, İndüklenmiş Sığır Pluripotent Kök Hücrelerinin Elde Edilmesinde Bazı İnhibitör, Aktivatör ve Sitokinlerin Etkileri, 2020 - 2023

Yılmaz Aktuna A., Akçalı K. C., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Kök Hücre Enstitüsü GMP Doku ve Hücre Üretim Merkezi, 2016 - 2023

Aydos K., Aydos O. S., Akçalı K. C., Topal Çelikkan F., TUBITAK Project, Farelerde Sağlıklı Sertoli Hücrelerinin Testisteki Embriyo Hücresi Benzeri Çok Küçük Hücrelerden (VSELs) Farklılaştırılan Spermatogenik Hücreler ile Ko-Transplantasyonunun Spermatogenez Restorasyonundaki Etkisi, 2021 - 2022

Fidan Ç., Devrim E., Akçalı K. C., Savaş B., Yüksel S., Bitirim C. V., TUBITAK Project, Gallik Asidin Deneysel Kolon Kanseri Oluşturulan Ratlarda Endoplazmik Retikulum Stres Yolağı ve Bağırsak Epitel Kök Hücreleri Üzerine Etkileri, 2021 - 2022

Akçalı K. C., Kiriş E., TUBITAK Project, Multipl Skleroz Hastalarından Oluşturulacak Uyarılmış Pluripotent Kök Hücre Tabanlı Oligodendrosit Modellerinde Nörotrofin ve Östrojen Sinyal Yolaklarının Cinsiyete Bağlı Etkilerinin Araştırılması, 2020 - 2022

Akçalı K. C., Yılmaz Aktuna A., Bitirim C. V., Ünal M. A., Kiliç P., BOZKIR A., TUBITAK Project, Development of Diagnostic Kits, Drug Formulations and Vaccines Against HIV, HPV and Influenza-borne Infections that Mostly Threaten Public Health in Our Country and in the World, 2020 - 2022

Akçalı K. C., Turan B., TUNCAY E., TUBITAK Project, İnsülin Direnci Gelişmiş Yaşlı Sıçan Kalp Fonksiyon Bozukluğunda İnsülin Uygulamasının Rolünün Elektrofizyolojik ve Moleküler-Biyokimyasal Yaklaşımlarla İncelenmesi, 2019 - 2022

Akçalı K. C., Tuncay E., Turan B., TUBITAK Project, Çinko taşıyıcıları ve mitokondri ilişkisinin yaşlanmaya bağlı kalp fonksiyon bozukluğundaki rolünün incelenmesi, 2018 - 2021

AKÇALI K. C., Project Supported by Other Official Institutions, İnsan kemik iliği kaynaklı mezenkimal kök hücre (Kİ-MKH) den elde edilen eksozomların kolorektal kanser (KRK) hücre hatları üzerinde etkisinin araştırılması, 2019 - 2020

Akçalı K. C., TUBITAK Project, Çinkonun Karaciğer Fibrozu Oluşumu ve Gerilemesinde Genetik ve Epigenetik Rolü, 2017 - 2020

Akçalı K. C., Tuncay E., Turan B., TUBITAK Project, Kardiyomiyositlerde endoplazmik retikulum stresi hücre içi serbest Zn<sup>2+</sup> regülasyonu ve mitokondri arasındaki çapraz ilişkinin kalp fonksiyon bozukluğu patolojisindeki rolünün incelenmesi, 2013 - 2017

AKÇALI K. C., TUBITAK Project, Kardiyomyositlerde Endoplazmik Retikülüm stresi hücre içi serbest Zn Regülasyonu ve mitokondri arasındaki çarpaz ilişkinin kalp fonksiyon bozukluğu patolojisindeki rolünün incelenmesi, 2013 - 2017  
AKÇALI K. C., TUBITAK Project, KARACIĞER FİBROZİSİNDE FLT3 GENİNİN ETKİSİ VE BU ETKİNİN MOLEKÜLER MEKANİZMASI, 2012 - 2015

## **Memberships / Tasks in Scientific Organizations**

KBAG , Member of Advisory Board, 2022 - Continues, Turkey

## **Metrics**

Publication: 68

Citation (WoS): 1848

Citation (Scopus): 2100

H-Index (WoS): 20

H-Index (Scopus): 21

## **Awards**

Akçalı K. C., Distinguished Service Award, International Academy Of Cardiovascular Sciences, May 2019

Akçalı K. C., Novartis Science Award, Novartis, February 2010