

Assoc. Prof. AYÇA BİLGİNOĞLU TOPCU

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: J-8076-2018

ScopusID: 15844836200

Yoksis Researcher ID: 169091

Education Information

Doctorate, Ankara University, Sağlık Bilimleri Enstitüsü, Biyofizik (Dr) (Tıp), Turkey 2005 - 2010

Postgraduate, Ankara University, Sağlık Bilimleri Enstitüsü, Biyofizik (YI) (Tezli) (Tıp), Turkey 2003 - 2005

Undergraduate, Ankara University, Fen Fakültesi, Biyoloji Bölümü, Turkey 1999 - 2003

Dissertations

Doctorate, Kardiyomiyositlerde hücre içi sodyum homeostazında rol oynayan faktörlerin incelenmesi, Ankara Üniversitesi, Sağlık Bilimleri Enstitüsü, Biyofizik (Dr) (Tıp), 2010

Postgraduate, Diyabetik kardiyomiyopatide 946-adrenerjik reseptör yanıtları, Ankara Üniversitesi, Sağlık Bilimleri Enstitüsü, Biyofizik (YI) (Tezli) (Tıp), 2005

Research Areas

Biophysics

Academic Titles / Tasks

Lecturer, Gaziosmanpaşa Üniversitesi, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2010 - 2011

Research Assistant, Ankara University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2005 - 2010

Academic and Administrative Experience

Head of Department, Ankara Yıldırım Beyazıt University, Tıp Fakültesi, Temel Tıp Bilimleri, 2024 - Continues

Ankara Yıldırım Beyazıt Üniversitesi, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2012 - 2015

Gaziosmanpaşa Üniversitesi, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2010 - 2012

Courses

BİYOFİZİK DÖNEM 1 LOKM. HEKİM, Undergraduate, 2017 - 2018
BİYOFİZİK dış hek. dönem 2, Undergraduate, 2017 - 2018
BİYOFİZİK dönem 1, Undergraduate, 2017 - 2018, 2016 - 2017
BİYOFİZİK dış hek. dönem 1, Undergraduate, 2017 - 2018, 2016 - 2017
BIOPHYSICS term 2, Undergraduate, 2017 - 2018, 2016 - 2017
BIOPHYSICS term 1, Undergraduate, 2017 - 2018, 2016 - 2017
BİYOFİZİK dönem 2, Undergraduate, 2017 - 2018, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of pioglitazone on the expression of ubiquitin proteasome system and autophagic proteins in rat pancreas with metabolic syndrome**
ÇAYLI S., ALİMOĞULLARI E., PİŞKİN İ., BİLGİNOĞLU A., NAKKAŞ H.
Journal of Molecular Histology, vol.52, no.5, pp.929-942, 2021 (SCI-Expanded)
- II. **Effect of tadalafil and nitric oxide agonist sodium nitroprusside on penicillin-induced epileptiform activity**
Aygün H., BİLGİNOĞLU TOPCU A.
Neurological Research, vol.42, no.1, pp.39-46, 2020 (SCI-Expanded)
- III. **Cardiovascular protective effect of pioglitazone on oxidative stress in rats with metabolic syndrome**
Bilginoglu A.
JOURNAL OF THE CHINESE MEDICAL ASSOCIATION, vol.82, no.6, pp.452-456, 2019 (SCI-Expanded)
- IV. **Pioglitazone provides beneficial effect in metabolic syndrome rats via affecting intracellular Na⁺ Dyshomeostasis.**
Bilginoglu A., Selcuk M. F. T., Nakkas H., TURAN B.
Journal of bioenergetics and biomembranes, vol.50, no.6, pp.437-445, 2018 (SCI-Expanded)
- V. **Intracellular levels of Na⁺ and TTX-sensitive Na⁺ channel current in diabetic rat ventricular cardiomyocytes**
BİLGİNOĞLU TOPCU A., KANDİLCİ H. B., TURAN B.
Cardiovascular Toxicology, vol.13, no.2, pp.138-147, 2013 (SCI-Expanded)
- VI. **Treatments with sodium selenate or doxycycline offset diabetes-induced perturbations of thioredoxin-1 levels and antioxidant capacity**
Atalay M., BİLGİNOĞLU TOPCU A., Kokkola T., Oksala N., TURAN B.
Molecular and Cellular Biochemistry, vol.351, no.1-2, pp.125-131, 2011 (SCI-Expanded)
- VII. **Profound cardioprotection with timolol in a female rat model of aging-related altered left ventricular function**
Sozmen N. N., TUNCAY E., BİLGİNOĞLU TOPCU A., TURAN B.
Canadian Journal of Physiology and Pharmacology, vol.89, no.4, pp.277-288, 2011 (SCI-Expanded)
- VIII. **Intracellular free zinc during cardiac excitation-contraction cycle: Calcium and redox dependencies**
TUNCAY E., BİLGİNOĞLU TOPCU A., Sozmen N. N., Zeydanli E. N., UĞUR M., Vassort G., TURAN B.
Cardiovascular Research, vol.89, no.3, pp.634-642, 2011 (SCI-Expanded)
- IX. **Antioxidant treatment protects diabetic rats from cardiac dysfunction by preserving contractile protein targets of oxidative stress**
Aydemir-Koksoy A., BİLGİNOĞLU TOPCU A., Sariahmetoglu M., Schulz R., TURAN B.
Journal of Nutritional Biochemistry, vol.21, no.9, pp.827-833, 2010 (SCI-Expanded)
- X. **Selenium restores defective beta-adrenergic receptor response of thoracic aorta in diabetic rats**
Zeydanli E. N., BİLGİNOĞLU TOPCU A., Tanriverdi E., GÜRDAL H., TURAN B.
Molecular and Cellular Biochemistry, vol.338, no.1-2, pp.191-201, 2010 (SCI-Expanded)
- XI. **Antioxidants but not doxycycline treatments restore depressed beta-adrenergic responses of the heart in diabetic rats**
BİLGİNOĞLU TOPCU A., Seymen A., TUNCAY E., Zeydanli E., Aydemir-Koksoy A., TURAN B.

Cardiovascular Toxicology, vol.9, no.1, pp.21-29, 2009 (SCI-Expanded)

- XII. **Protective action of doxycycline against diabetic cardiomyopathy in rats**
YARAŞ N., Sariahmetoglu M., BİLGİNOĞLU TOPCU A., Aydemir-Koksoy A., Onay-Besikci A., TURAN B., Schulz R.
British Journal of Pharmacology, vol.155, no.8, pp.1174-1184, 2008 (SCI-Expanded)
- XIII. **The role of gender differences in beta-adrenergic receptor responsiveness of diabetic rat heart**
BİLGİNOĞLU TOPCU A., Amber Cicek F., UĞUR M., GÜRDAL H., TURAN B.
Molecular and Cellular Biochemistry, vol.305, no.1-2, pp.63-69, 2007 (SCI-Expanded)
- XIV. **Restoration of diabetes-induced abnormal local Ca²⁺ release in cardiomyocytes by angiotensin II receptor blockade**
YARAŞ N., BİLGİNOĞLU TOPCU A., Vassort G., TURAN B.
American Journal of Physiology - Heart and Circulatory Physiology, vol.292, no.2, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **Possible protective effect of quercetin against oxidative stress in liver from metabolic syndrome rats**
BİLGİNOĞLU A.
Journal of Contemporary Medicine, 2019 (Peer-Reviewed Journal)
- II. **Pioglitazone Reduces Oxidative Stress in Kidney Against High Sucrose Diet-Induced Metabolic Syndrome in Rats**
BİLGİNOĞLU A.
Kafkas Tıp Bilimleri Dergisi, 2018 (Peer-Reviewed Journal)
- III. **Protective effect of melatonin on adriamycin-induced cardiotoxicity in rats**
BİLGİNOĞLU A., AYDIN D., ÖZSOY Ş., AYGÜN H.
TURK KARDIYOLOJİ DERNEĞİ ARSIVI-ARCHIVES OF THE TURKISH SOCIETY OF CARDIOLOGY, 2014 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of pioglitazone on oxidative stress in liver of metabolic syndrome rats**
BİLGİNOĞLU A.
V. Uluslararası Multidisipliner Çalışmaları Sempozyumu (ISMS), 16 - 17 November 2018
- II. **Cardiovascular risks and benefits of rosiglitazone in metabolic syndrome**
BİLGİNOĞLU A.
3. Uluslararası Sağlık Bilimleri Kongresi, 29 November - 01 December 2018
- III. **Anatomical illustrations at Hamse-i Şanizade IV: the kidney.**
Akkaşoğlu S., FARIMAZ M., AKDEMİR AKTAŞ H., BİLGİNOĞLU A., ALDUR M. M., ÇELİK H. H.
British Association of Clinical Anatomists, 25 - 26 June 2018
- IV. **EFFECT OF PİOGLİTAZONE ON INTRACELLULAR NA HOMEOSTASIS IN METABOLIC SYNDROME-INDUCED CARDIOMYOPATHY IN MALE RATS**
BİLGİNOĞLU A., TURAN B.
19th WASET INTERNATIONAL CONFERENCE OF BIOPHYSICS, ROMA, Italy, 18 - 19 September 2017
- V. **EFFECT OF QUERCETIN ON METABOLIC SYNDROME - INDUCED OXIDATIVE STRESS IN RAT HEARTS.**
BİLGİNOĞLU A.
18th ISANH Middle East World Congress "Beirut Antioxidants 2017", BEYRUT, Lebanon, 3 - 04 May 2017
- VI. **Oksidatif strese karşı melatoninin etkisi**
BİLGİNOĞLU A.
26. Ulusal Biyofizik Kongresi, Turkey, 9 - 12 September 2014
- VII. **Sıçanlarda Adriyamisin'in Oluşturduğu Kardiyotoksite Üzerine Melatoninin Etkisi**
BİLGİNOĞLU A., AYDIN D., ÖZSOY Ş., AYGÜN H., ÇELİK A.
25. Ulusal Biyofizik Kongresi, Turkey, 24 - 27 September 2013

- VIII. **Cardioprotective effect of melatonin against adriamycin induced cardiotoxicity in rats**
BİLGİNOĞLU A., AYDIN D., ÖZSOY Ş., AYGÜN H., ÇELİK A.
ISHR-WORLD CONGRESS, 30 June - 04 July 2013
- IX. **Intracellular Na homeostasis in mammalian cardiomyocytes especially diabetic cardiomyocytes**
BİLGİNOĞLU A., KANDİLCİ H. B., TURAN B.
International Symposium on New Approaches in Cardiovascular Disorders, 4 - 08 May 2011
- X. **ZINC RELEASE MODULATES CARDIAC RYANODINE RECEPTORS**
BİLGİNOĞLU A., OKATAN E. N., tuncay e., SEYMEN A., TURAN B.
FEPS, 12 - 15 November 2009
- XI. **Antioxidants but not doxycycline restore depressed β -adrenergic responses of the heart in diabetic rats**
BİLGİNOĞLU A., SEYMEN A., tuncay e., aydemir köksoy a., TURAN B.
ISHR, 28 - 31 May 2008
- XII. **Roles of oxidant stress and matrix metalloproteinases in endothelium- dependent relaxation of diabetic rat thorasic aorta**
OKATAN E. N., BİLGİNOĞLU A., aydemir köksoy a., TURAN B.
EUROPEAN SECTION OF ISHR, 28 - 31 May 2008
- XIII. **Matrix metalloproteinases contribute to diabetes induced cardiovascular dysfunction**
aydemir köksoy a., OKATAN E. N., BİLGİNOĞLU A., GÜRDAL H., schulz r., TURAN B.
Nato Advanced Research Workshop, 12 - 16 May 2008
- XIV. **The role of gender differences in beta-adrenergic receptor responsiveness of diabetic rat heart**
BİLGİNOĞLU A., ÇİÇEK F., UĞUR M., GÜRDAL H., TURAN B.
ISHR, 22 - 25 June 2007
- XV. **Inhibition of matrix metalloproteinases reduces streptozotocin-induced diabetic cardiomyopathy**
sarıahmetoğlu M., aydemir köksoy a., BİLGİNOĞLU A., onay beşikçi a., TURAN B., schulz r.
ISHR, 22 - 25 June 2007
- XVI. **Reduced myocardial contractile function in diabetic cardiomyopathy—possible role of matrix metalloproteinase-2**
YARAŞ N., BİLGİNOĞLU A., aydemir köksoy a., schulz r., TURAN B.
ISHR, 22 - 25 June 2007
- XVII. **β -adrenergic receptor responses in diabetic rat hearts: effect of sex differences**
BİLGİNOĞLU A., ÖZDEMİR S., YARAŞ N., UĞUR M., TURAN B.
Nato Advanced Research Workshop, 2 - 07 February 2005

Supported Projects

BİLGİNOĞLU TOPCU A., Project Supported by Higher Education Institutions, Cardiovascular risks and benefits of rosiglitazone in metabolic syndrome, 2018 - 2019

BİLGİNOĞLU TOPCU A., Project Supported by Higher Education Institutions, Pioglitazon ve kuersetinin metabolik sendromlu sıçan kardiyomiyositlerinde hücre içi Na⁺ homeostazı üzerine oksidatif stresin etkisi, 2016 - 2018

Nakkaş H., Turan B., Tutar Selçuk M. F., Bilginoğlu Topcu A., TÜBİTAK Project, Pioglitazon Ve Kuersetinin Metabolik Sendromlu Sıçan Kardiyomiyositlerinde Hücre İçi Na Homeostazına Etkilerinin İncelenmesi, 2015 - 2017

BİLGİNOĞLU TOPCU A., Project Supported by Higher Education Institutions, Cardioprotective effect of melatonin against adriamycin induced cardiotoxicity in rats., 2013 - 2014

Metrics

Publication: 36

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Citation (Scopus): 349

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