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International Researcher IDs

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Publons / Web Of Science ResearcherID: Q-3391-2019

ScopusID: 56520361400

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Education Information

Doctorate, Gazi University, Sağlık Bilimleri Enstitüsü, -, Turkey 2013 - 2017

Postgraduate, Gazi University, Sağlık Bilimleri Enstitüsü, -, Turkey 2011 - 2013

Undergraduate, Gazi University, Eczacılık Fakültesi, Turkey 2006 - 2011

Certificates, Courses and Trainings

Education Management and Planning, Eğitimcilerin Eğitimi Sertifika Programı, Gazi Üniversitesi, 2023

Vocational Training, Lisansüstü Tez Danışmanlığı Eğitimi, Gazi Üniversitesi, 2021

Health&Medicine, İleri İyi Klinik Uygulamalar (Ver 2.0), Klinik Araştırmalar Derneği, 2018

Health&Medicine, Temel İyi Klinik Uygulamalar (Ver2.0), Klinik Araştırmalar Derneği, 2018

Health&Medicine, Bilimsel Araştırmalarda Deney Hayvanları Kullanımına Ait Eğitim Sertifikası Programı, Kobay Deney Hayvanları Laboratuvarı A.Ş., 2012

Dissertations

Doctorate, İlaçla indüklenen senesent hücre sekretomu, hücre proliferasyonu ve rho kinaz arasındaki olası ilişkinin incelenmesi, Gazi University, Sağlık Bilimleri Enstitüsü, -, 2017

Postgraduate, Ouabain ile indüklenen senesens ve RHO kinaz arasındaki olası ilişkinin incelenmesi, Gazi University, Sağlık Bilimleri Enstitüsü, -, 2013

Research Areas

Pharmacology and Therapeutics, Pharmacology

Academic Titles / Tasks

Assistant Professor, Gazi University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri, 2021 - Continues

Assistant Professor, Hitit University, School Of Medicine, Department Of Internal Medicine, 2019 - 2021

Academic and Administrative Experience

Fakülte Kurulu Üyesi, Gazi University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri, 2022 - Continues

Adaptation/Exemption Committee Member, Gazi University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri, 2022 - Continues

Exam Program Preparation Commission Member, Gazi University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri, 2023 - 2024

BİRİM AR-GE ÇALIŞMA EKİBİ ÜYESİ, Gazi University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri, 2022 - 2024

Measurement and Evaluation Board Member, Gazi University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri, 2022 - 2024

Head of Department, Hitit University, School Of Medicine, Department Of Internal Medicine, 2019 - 2021

Ethics Committee Member, Hitit University, School Of Medicine, Department Of Internal Medicine, 2019 - 2021

Courses

Farmakoloji III, Undergraduate, 2021 - 2022

Mezuniyet Projesi I, Undergraduate, 2020 - 2021

Mezuniyet Projesi I, Undergraduate, 2020 - 2021

Kardiyovasküler Sistem Farmakolojisi, Doctorate, 2020 - 2021

Advising Theses

Şimay Demir Y. D., İLAÇLA İNDÜKLENEN SENESENS GELİŞİMİNDE VE SEKRETOMOLUŞUMUNDA FLOTİLLİN-1 VE FLOTİLLİN-2 PROTEİNLERİNİNOLASI ROLLERİNİN DEĞERLENDİRİLMESİ, Postgraduate, E.ÖZDEK(Student), 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Temporal regulation of gene expression and pathways in chemotherapy-induced senescence in HeLa cervical cancer cell line**
Suclearli C., Şimay Demir Y. D., Özdemir A., Ark M.
BIOSYSTEMS, vol.237, 2024 (SCI-Expanded)
- II. **Screening of medicinal plant extracts as novel DNA gyrase inhibitors**
Oyardı Ö., Özçelik B., Caliskan U. K., Demir S., Ark M.
INDIAN JOURNAL OF TRADITIONAL KNOWLEDGE, vol.22, no.1, pp.211-219, 2023 (SCI-Expanded)
- III. **The implication of ROCK 2 as a potential senotherapeutic target via the suppression of the harmful effects of the SASP: Do senescent cancer cells really engulf the other cells?**
Demir Y. D., Özdemir A., Suclearli C., Benhür E., Ark M.
CELLULAR SIGNALLING, vol.84, 2021 (SCI-Expanded)
- IV. **Antimigratory effect of pyrazole derivatives through the induction of STAT1 phosphorylation in A549 cancer cells**
Şimay Demir Y. D., Özdemir A., Özdemir R. G., Cevher S. C., Çalışkan B., Ark M.
JOURNAL OF PHARMACY AND PHARMACOLOGY, vol.73, no.6, pp.808-815, 2021 (SCI-Expanded)
- V. **A novel proteolytic cleavage of ROCK 1 in cell death: Not only by caspases 3 and 7 but also by caspase 2**
Özdemir A., İbişoğlu B., Şimay Demir Y. D., Benhür E., Valipour F., Ark M.
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.547, pp.118-124, 2021 (SCI-Expanded)
- VI. **Novel palladium(II) complexes of N-(5-nitro-salicylidene)-Schiff bases: Synthesis, spectroscopic**

characterization and cytotoxicity investigation

Özdemir Ö., Gurkan P., Şimay Demir Y. D., Ark M.

JOURNAL OF MOLECULAR STRUCTURE, vol.1207, 2020 (SCI-Expanded)

VII. The connection between the cardiac glycoside-induced senescent cell morphology and Rho/Rho kinase pathway

Simay Y. D., ÖZDEMİR A., Ibisoglu B., ARK M.

CYTOSKELETON, vol.75, no.11, pp.461-471, 2018 (SCI-Expanded)

VIII. Promising anticancer activity of *Cyclotrichium niveum* L. extracts through induction of both apoptosis and necrosis

ÖZDEMİR A., Yıldız M., ŞENOL DENİZ F. S., Simay Y. D., Iboğlu B., GÖKBULUT A., ERDOĞAN ORHAN İ., ARK M.

FOOD AND CHEMICAL TOXICOLOGY, vol.109, pp.898-909, 2017 (SCI-Expanded)

IX. Cardiac glycoside-induced cell death and Rho/Rho kinase pathway: Implication of different regulation in cancer cell lines

ÖZDEMİR A., Simay Y. D., Ibisoglu B., Yaren B., Bulbul D., ARK M.

STEROIDS, vol.109, pp.29-43, 2016 (SCI-Expanded)

X. Ouabain induces Rho-dependent rock activation and membrane blebbing in cultured endothelial cells

Ozdemir A., Ibisoglu B., Simay Y. D., Polat B., Ark M.

MOLECULAR BIOLOGY, vol.49, no.1, pp.138-143, 2015 (SCI-Expanded)

Articles Published in Other Journals

I. Antioxidant and Cytotoxic Activity Studies in Series of Higher Amino Acid Schiff Bases

Özdemir Ö., Gürkan P., Şimay Demir Y. D., Ark M.

GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.33, no.3, pp.646-660, 2020 (ESCI)

Books & Book Chapters

I. Senescent cells and SASP in cancer microenvironment: New approaches in cancer therapy

ÖZDEMİR A., ŞİMAY DEMİR Y. D., YEŞİLYURT Z. E., ARK M.

in: Advances in Protein Chemistry and Structural Biology, rossen Donev, Editor, Elsevier, pp.115-158, 2023

II. Hücre Kültürü ve Temel Moleküler Biyoloji Protokolleri

ARK M., ÖZDEMİR A., ŞİMAY Y. D., İbişoğlu B.

Ankara Nobel Tıp Kitabevleri, Ankara, 2017

Refereed Congress / Symposium Publications in Proceedings

I. Cardiotrophin 1: A Novel SASP Marker in Senescent MCF7 Cells

Özdemir A., Tayyar T., Şimay Demir Y. D., Ark M.

The 48th FEBS Congress, Milan, Italy, 29 June - 03 July 2024, pp.318

II. KEMOTERAPİ İLE İNDÜKLENEN SENESENT HÜCRE SEKRETOMUNUN MODÜLASYONU İÇİN YENİ BİR HEDEF OLARAK LİPİT RAFTLARININ DEĞERLENDİRİLMESİ

Şimay Demir Y. D., Özdek E., Yeşilyurt Z. E., Özdemir A., Ark M.

2. ULUSLARARASI 27. ULUSAL FARMAKOLOJİ KONGRESİ, Antalya, Turkey, 23 - 26 November 2023

III. Platinum(II) complexes with 2-/3-/4-(benzimidazol-2-yl)phenol: Synthesis, characterization and in vitro cytotoxic activities

GÖZELLE M., ŞİMAY DEMİR Y. D.

6th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2023), Ankara,

Turkey, 11 - 13 October 2023

- IV. **Synthesize Characterization and Determination Of Some Biological Properties of Tetrazole-Containing Schiff Base Ligand and Its Pt(II) Complex**
Okuş F., Sarı N., Hasanoğlu Özkan E., Ünal F., Şimay Demir Y. D., Çakmak G., Yüzbaşıoğlu D.
AGBIOL 2023 V. INTERNATIONAL AGRICULTURAL, BIOLOGICAL & LIFE SCIENCE CONFERENCE, Edirne, Turkey, 18 - 20 September 2023
- V. **Doksorubisin ile İndüklenen Senesent Hela Hücrelerinde Parekoksibin Senomorfik Etkinliğinin Değerlendirilmesi**
Bozan E. B., ÖZDEMİR A., ŞİMAY DEMİR Y. D., ARK M.
12th International Medicine and Health Sciences Researches Congress, Ankara, Turkey, 18 - 19 March 2023
- VI. **Antimigratory Activity of Methimazole Derivative Compound**
ŞİMAY DEMİR Y. D., DÖNMEZ M. O., ÇAPAN İ.
10th International Medicine and Health Sciences Researches Congress, Ankara, Turkey, 27 - 28 August 2022
- VII. **Investigation of the Antimigratory Activity of 2-Aminothiazole Derivative Compound in Two Different Cancer Cells**
ŞİMAY DEMİR Y. D., DÖNMEZ M. O., ERGÜL A. G.
International Academic Studies Conference, Turkey, 3 - 05 August 2022
- VIII. **A Novel Specific Cell Death Morphology for Cardiac Glycosides and MCF7 Cells: Implication of E-Cadherin and Cell-Cell Junctions**
Özdemir A., Yeşilyurt Z. E., Şimay Demir Y. D., Ark M.
ICDS meeting "Future of Cell Death in Basic Science and Translational Medicine, İstanbul, Turkey, 2 - 04 July 2022
- IX. **Antimigratory Effect of a Newly Synthesized Pyrazole Derivative Compound in A549 Cancer Cells**
ÖZDEMİR A., Gönbe Özdemir R., ŞİMAY DEMİR Y. D., Cevher S. C., Şahinoğlu E., ÇALIŞKAN B., ARK M.
DGZ International Meeting, 17 - 19 September 2018, vol.44
- X. **Possible involvement of Rho Kinase on the secretory activity of drug-induced senescent cell**
ŞİMAY DEMİR Y. D., ÖZDEMİR A., ARK M.
Cold Spring Harbor Meetings, 15 - 19 August 2017
- XI. **Holographic view of the senescent cells: Imagine all the senescent cells are not flattened**
Simay Y. D., ÖZDEMİR A., İbisoglu B., ARK M.
Experimental Biology Meeting, Illinois, United States Of America, 22 - 26 April 2017, vol.31
- XII. **A possible novel mechanism in the formation of senescent cell morphology: caveolar depletion and rho kinases**
ŞİMAY DEMİR Y. D., ÖZDEMİR A., İbişoğlu B., ARK M.
12th International Congress of Cell Biology, 21 - 25 July 2016
- XIII. **A novel proteolytic cleavage of ROCK 1 by caspase-2**
İbişoğlu B., ÖZDEMİR A., ŞİMAY DEMİR Y. D., ARK M.
7th European Congress of Pharmacology, 26 - 30 June 2016
- XIV. **Cytotoxic Activity Appraisal of Different Extracts From Cyclotrichium Niveum L. In Three Cell Lines**
Yıldız M., ŞENOL DENİZ F. S., ÖZDEMİR A., İbişoğlu B., ŞİMAY DEMİR Y. D., ERDOĞAN ORHAN İ., ARK M.
pytopharm, 3 - 05 July 2014
- XV. **Combination of ouabain and a specific ROCK inhibitor Y27632 in HeLa cells: implication of therapeutic benefits**
İbişoğlu B., ŞİMAY DEMİR Y. D., ÖZDEMİR A., ARK M.
FASEB JOURNAL, San Diego, 26 - 30 April 2014, vol.28
- XVI. **Cleavage of ROCK II: As a Common Phenomenon in Cell Death**
ÖZDEMİR A., İbisoglu B., Simay Y. D., Yaren B. M., ARK M.
Joint Annual Meeting of the ASPET/BPS at Experimental Biology (EB), Massachusetts, United States Of America, 20 - 24 April 2013, vol.27
- XVII. **Rock Inhibition Reduces Senescent Cell Size**
Simay Y. D., Hosbas S., İbisoglu B., Yıldız M., ÖZDEMİR A., ARK M.
Joint Annual Meeting of the ASPET/BPS at Experimental Biology (EB), Massachusetts, United States Of America, 20

Supported Projects

Ark M., Özdemir A., Şimay Demir Y. D., Basan H., Sucularlı C., TUBITAK Project, Kardiyak glikozidlerin kanser hücrelerindeki etkileri için olası yeni hedef molekül(ler)in keşfi, 2024 - 2026

Şimay Demir Y. D., Ark M., Özdemir A., TUBITAK Project, Kemoterapi ile İndüklenen Kanser Hücre Sekretomunun Modülasyonu İçin Yeni Bir Hedef Olarak Lipit Raftlarının Değerlendirilmesi, 2022 - 2025

Yüzbaşıoğlu D., Çakmak G., Sarı N., Ünal F., Hasanoğlu Özkan E., Şimay Demir Y. D., TUBITAK Project, Tetrazolato ligandı ve platin kompleksinin in siliko yaklaşım ve in vitro genotoksitesite yöntemleriyle prelinik güvenliliğinin değerlendirilmesi, 2022 - 2024

Ark M., Şimay Demir Y. D., Özdemir A., Project Supported by Higher Education Institutions, Senoterapötikler Bazı benzimidazol ve benzoksazon türevi olası ROCK inhibitörlerinin kanser mikroçevresinde senesent hücreler üzerinde etkinliğinin incelenmesi, 2021 - 2023

Şimay Demir Y. D., Ark M., Project Supported by Higher Education Institutions, Kemoterapi ile indüklenen senesent kanser hücrelerinde yeni bir senoterapötik hedef olarak iyon kanallarının incelenmesi, 2021 - 2022

Ark M., ÖZDEMİR A., TUBITAK Project, Kanser hücrelerinde kemoterapötiklerle indüklenen senesense ait morfolojik değişiklikler ve sekretom gelişiminde olası mekanizmaların incelenmesi, 2016 - 2019

Şimay Demir Y. D., Ark M., Project Supported by Higher Education Institutions, İlaçla indüklenen senesent hücre sekretomu, hücre proliferasyonu ve Rho kinaz arasındaki olası ilişkinin incelenmesi, 2017 - 2018

Ark M., TUBITAK Project, Kardiyak glikozitler ve Rho/Rho kinaz (Rock) yolağı arasındaki olası bağlantının kanser hücre dizilerinde incelenmesi, 2011 - 2014

Patent

Özdemir A., Tayyar T., Ark M., Şimay Demir Y. D., Use of Cardiotrophin-1 as a Biomarker of Cellular Senescence in Estrogen Receptor Positive Breast Cancer Cells, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 2024/006099 , Standard Registration, 2024

Ark M., Özdemir A., Şimay Demir Y. D., Bozan E. B., USE OF MOXIFLOXACIN AS A SENOMORPHIC DRUG, Patent, CHAPTER A Human Needs, The Invention Recourse Number: PCT/TR2023/050408 , Standard Registration, 2023

Ark M., Özdemir A., Şimay Demir Y. D., Bozan E. B., MOKSİFLOKSASİNİN SENOMORFİK ETKİLİ İLAÇ OLARAK KULLANIMI, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 2022/008651 , Standard Registration, 2022

Memberships / Tasks in Scientific Organizations

Yaşam Bilimleri Derneği, Board Member, 2015 - Continues, Turkey

Türk Farmakoloji Derneği, Member, 2015 - Continues, Turkey

Scientific Refereeing

TURKISH JOURNAL OF BIOCHEMISTRY-TÜRK BİYOKİMYA DERGİSİ, SCI Journal, June 2021

TÜRK HİJYEN VE DENEYSEL BİYOLOJİ DERGİSİ, National Scientific Refreed Journal, June 2020

Tasks In Event Organizations

Şimay Demir Y. D., 3rd Gazi Pharma symposium series, Scientific Congress, Ankara, Turkey, Eylül 2022

Metrics

Publication: 30

Citation (WoS): 54

Citation (Scopus): 94

H-Index (WoS): 5

H-Index (Scopus): 6

Scholarships

2211-E Doğrudan Yurt İçi Doktora Burs Programı, TUBITAK, 2013 - 2017

2210-A Genel Yurt İçi Yüksek Lisans Burs Programı, TUBITAK, 2011 - 2013