

## Assoc. Prof. ECE ŞİMŞEK

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-7642-6601

Publons / Web Of Science ResearcherID: C-2301-2016

Yoksis Researcher ID: 123170

### Education Information

Doctorate, Akdeniz University, Fen Edebiyat Fakültesi, Biyoloji, Turkey 2004 - 2010

Postgraduate, Akdeniz University, Fen Edebiyat Fakültesi, Biyoloji, Turkey 2001 - 2004

Undergraduate, Akdeniz University, Fen Edebiyat Fakültesi, Biyoloji, Turkey 1996 - 2001

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, Computer-aided Drug Design, Bahçeşehir Üniversitesi, Tıp Fakültesi, Biyofizik Bölümü, 2016

Education Management and Planning, SteponePlus Real-Time PCR System, MedSanTek Laboratuar Malzemleri LTD., 2016

Education Management and Planning, FP7 Project Proposal Preparation and Submission & Project Management 2-day training programme, Tübitak, 2013

Education Management and Planning, Biyoinformatik, Ege üniversitesi, 2004

### Dissertations

Doctorate, 4T1 ve 4THMpc Fare Meme Kanseri hücre Hatlarında Talidomid'in Tek Başına ve Radyoterapi ile Kombine Olarak Anjiyogenik Faktörlerden Substance P ve Substance P'yi Parçalayan ADAM 10 ve Neprilizin Enzimleri Üzerine Etkilerinin Araştırılması, Akdeniz University, Biyoloji Bölümü, Moleküler Biyoloji Anabilim Dalı, 2010

Postgraduate, Demir Depo Proteini Ferritin'in Kemoterapötikleri Hapsetme Özelliğinin Araştırılması ve Geliştirilmesi, Akdeniz University, Biyoloji, Moleküler Biyoloji, 2001

### Research Areas

Life Sciences, Molecular Biology and Genetics, Molecular Biology of Cancer, Protein Engineering, Neurobiology, Natural Sciences

## Academic Titles / Tasks

Associate Professor, Akdeniz University, Faculty of Health Sciences, Beslenme Ve Diyetetik, 2018 - Continues  
Assistant Professor, Akdeniz University, Antalya Sağlık Yüksekokulu, Beslenme Ve Diyetetik, 2018 - 2018  
Assistant Professor, Akdeniz University, Antalya Sağlık Yüksekokulu, Beslenme Ve Diyetetik, 2012 - 2018  
Research Assistant, Akdeniz University, Fen Edebiyat Fakültesi, Biyoloji, 2001 - 2010

## Academic and Administrative Experience

Akdeniz University, Antalya Sağlık Yüksekokulu, 2015 - 2018  
Akdeniz University, Antalya Sağlık Yüksekokulu, Beslenme Ve Diyetetik, 2016 - 2017

## Courses

Anjiyogenezin Temel İlkeleri, Postgraduate, 2014 - 2015  
Mikrobiyoloji ve Parazitoloji, Undergraduate, 2013 - 2014

## Advising Theses

ŞİMŞEK E., Novalgin (metamizol Sodyum)'in İnsan Glioblastoma Hücre hattı U-87 MG Üzerine Potansiyel Anjiyogenik etkisinin in vitro araştırılması, Postgraduate, O.KOÇAK(Student), 2017

## Jury Memberships

Appointment to Academic Staff-Assistant Professorship, Yabancı Dil Sınav Jüriliği, Akdeniz Üniversitesi, January, 2018  
Appointment to Academic Staff-Assistant Professorship, Yardımcı Doçentlik Kadrosuna Atama Jürisi, Akdeniz Üniversitesi, December, 2017  
Post Graduate, Yüksek lisans tez savunma, Akdeniz Üniversitesi, January, 2014

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

- I. **The In vitro evaluation of in silico-designed synthetic peptides AKVUAM-1 and AKVUAM-2 on human lung fibroblast cell line MRC5 and Mycobacterium tuberculosis isolates**  
ŞİMŞEK E., YILDIRIM K., Akcıt E. T., Atas C., Kocak O., Altinkaynak A., Salehi Moharer M. P., Yazıcı E., Sisaneci A., Kalay M., et al.  
Microbial Pathogenesis, vol.197, 2024 (SCI-Expanded)
- II. **A rapid and simple modified nitrate reductase assay for testing first and second-line antituberculosis drug susceptibilities in Mycobacterium tuberculosis isolates**  
ŞİMŞEK E., YILDIRIM K., Atas C., ÇOBAN A. Y.  
Diagnostic Microbiology and Infectious Disease, vol.110, no.4, 2024 (SCI-Expanded)
- III. **The Effect of Inoculum Size on Antimicrobial Susceptibility Testing of Mycobacterium tuberculosis**  
YILDIRIM K., Atas C., ŞİMŞEK E., ÇOBAN A. Y.  
Microbiology spectrum, vol.11, no.3, 2023 (SCI-Expanded)

- IV. **The Anti-angiogenic and Anti-microbial Effect of Diosmin: Potential Receptor Interactions via Molecular Docking**  
ŞİMŞEK E., Koçak O., YILDIRIM K., Kuruoğlu A., Taşkın N. D., Bozkurt S., İMİR N., Ataş C., Akçit E. T., ÇOBAN M., et al.  
Revista Brasileira de Farmacognosia, vol.33, no.2, pp.422-431, 2023 (SCI-Expanded)
- V. **Novel thiourea derivatives against Mycobacterium tuberculosis: synthesis, characterization and molecular docking studies**  
Kutlu E., Emen F. M., Yıldırım K., Ataş C., Demirdogen R. E., Yesilkaynak T., Kinaytürk N. K., Şimşek E., Çoban A. Y.  
Phosphorus, Sulfur and Silicon and the Related Elements, vol.198, no.10, pp.844-853, 2023 (SCI-Expanded)
- VI. **Caspase-mediated Apoptotic Effects of Ebenus boissieri Barbey Extracts on Human Cervical Cancer Cell Line HeLa**  
ŞİMŞEK E., İMİR N., Aydemir E., GÖKTÜRK R. S., Yesilada E., FIŞKIN K.  
PHARMACOGNOSY MAGAZINE, vol.13, no.50, pp.254-259, 2017 (SCI-Expanded)
- VII. **Endostatin and irradiation modifies ADAM 10 and Nepriylsin activities in breast cancer cells**  
AYDEMİR E., ŞİMŞEK E., KORCUM ŞAHİN A. F., FIŞKIN K.  
MOLECULAR MEDICINE REPORTS, vol.14, pp.2343-2351, 2016 (SCI-Expanded)
- VIII. **Cytotoxic and immunomodulatory effects of Ebenus boissieri Barbey on breast cancer cells**  
İMİR N., AYDEMİR E., ŞİMŞEK E., GÖKTÜRK R. S., Yesilada E., FIŞKIN K.  
GENETICS AND MOLECULAR RESEARCH, vol.15, no.1, 2016 (SCI-Expanded)
- IX. **Dimethyl sulfoxide-caused changes in pro- and anti-angiogenic factor levels could contribute to an anti-angiogenic response in HeLa cells**  
ŞİMŞEK E., Aydemir E. A., İMİR N., Koçak O., Kuruoğlu A., FIŞKIN K.  
NEUROPEPTIDES, vol.53, pp.37-43, 2015 (SCI-Expanded)
- X. **Cytotoxic and apoptotic effects of Ebenus boissieri Barbey on human lung cancer cell line A549**  
Aydemir E., ŞİMŞEK E., İMİR N., GÖKTÜRK R. S., Yesilada E., FIŞKIN K.  
PHARMACOGNOSY MAGAZINE, vol.11, no.42, 2015 (SCI-Expanded)
- XI. **Thalidomide combined with irradiation alters the activity of two proteases**  
ŞİMŞEK E., AYDEMİR E., Korcum A. F., FIŞKIN K.  
MOLECULAR MEDICINE REPORTS, vol.11, no.2, pp.1535-1541, 2015 (SCI-Expanded)
- XII. **Substance P: A trivet between cancer, angiogenesis and pain**  
ŞİMŞEK E.  
INTERNATIONAL JOURNAL OF MOLECULAR MEDICINE, vol.36, 2015 (SCI-Expanded)
- XIII. **DMSO exhibits similar cytotoxicity effects to thalidomide in mouse breast cancer cells**  
Oz E., AYDEMİR E., FIŞKIN K.  
ONCOLOGY LETTERS, vol.3, no.4, pp.927-929, 2012 (SCI-Expanded)
- XIV. **Glycyrrhiza flavescens subsp antalyensis exerts antiproliferative effects on melanoma cells via altering Tnf and Ifn levels**  
ESRA ASLAN A., ŞİMŞEK E., GÖKTÜRK R. S., ÖZKAN G., FIŞKIN K.  
Food And Chemical Toxicology, vol.49, pp.820-828, 2011 (SCI-Expanded)
- XV. **Thalidomide and irradiation combination therapy increases substance P levels in vitro**  
Oz E., AYDEMİR E., Korcum A. F., FIŞKIN K.  
EXPERIMENTAL AND THERAPEUTIC MEDICINE, vol.2, no.3, pp.529-535, 2011 (SCI-Expanded)
- XVI. **Testing the efficacy of substance P fragments as antitumor agents**  
Erin N., Korcum A. F., Simsek E., Aydemir E., Sanlioglu S.  
DRUGS OF THE FUTURE, vol.32, pp.58, 2007 (SCI-Expanded)
- XVII. **Magic ferritin: A novel chemotherapeutic encapsulation bullet**  
Simsek E., Kilic M. A.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.293, no.1, pp.509-513, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The in vitro and in silico assessment of the proliferative and angiogenic potential of Substance K: Interaction of Substance K between the Neurokinin-1, Neurokinin-2, and Tie-2 receptor proteins**  
ŞİMŞEK E., TANYEL AKÇİT E., YILDIRIM K., KOÇAK O., BOZKURT S., ÇOBAN A. Y.  
Chemical Biology Letters, vol.11, no.4, 2024 (ESCI)
- II. **Didymin Exhibits Different Cytotoxicity Patterns on U-87 MG Human Glioblastoma Cells and Orchestrates the Release of Substance P (SP) and Interleukin-6 (IL-6) in a Time Depending Manner**  
Bulut N., Şimşek E.  
EURASIAN JOURNAL OF MEDICINE AND ONCOLOGY, vol.7, no.4, pp.326-333, 2023 (ESCI)
- III. **A PARADOX FROM A NEUROTRANSMITTER: THE OPPOSITE EFFECTS OF SUBSTANCE P AND ITS PHYSIOLOGICAL FRAGMENTS SP (1-7) AND SP (9-11) ON THE PROLIFERATION OF HUMAN BREAST CANCER CELLS AND THE MIGRATION CAPABILITIES OF HUVEC CELLS**  
Koçak O., ŞİMŞEK E.  
World Cancer Research Journal, vol.9, 2022 (ESCI)
- IV. **OVER KANSERİ HÜCRELERİNDE PRİMA-1 Met TEDAVİSİNE YANIT OLARAK DEĞİŞEN miRNA EKSPRESYON ANALİZİ**  
İMİR N., AYDEMİR E., ŞİMŞEK E.  
SAĞLIK BİLİMLERİ DERGİSİ, vol.29, pp.19-25, 2020 (Peer-Reviewed Journal)
- V. **The Antiangiogenic Effects of Tamoxifen might be Attributed to Receptor Binding Capacity of its Solvent Dimethylsulfoxide in Breast Cancer: A Molecular Docking Study**  
Koçak O., Taskin N. D., ŞİMŞEK E.  
JOURNAL OF PHARMACEUTICAL RESEARCH INTERNATIONAL, vol.30, no.2, 2019 (ESCI)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **The Importance of Bedaquiline in the Treatment of Multidrug-Resistant Tuberculosis**  
LİCİNA M., ATAŞ C., YILDIRIM K., TANYEL AKÇİT E., ŞİMŞEK E., ÇOBAN A. Y.  
INTERNATIONAL EUROPA SCIENTIFIC RESEARCHES CONGRESS, Ankara, Turkey, 26 February 2023, pp.121-123
- II. **AİLESEL AKDENİZ ATEŞİ (FMF) DİNMEYEN BİR SANCİ MI ?**  
BARAN M., KOÇAK O., TANYEL AKÇİT E., ŞİMŞEK E., YILDIRIM K., ÇOBAN A. Y.  
1st International Conference on Trends in Advanced Research ICTAR 2023, Konya, Turkey, 4 - 07 March 2023, vol.1, pp.473
- III. **The Importance of Bedaquiline in the treatment of multidrug resistant tuberculosis**  
Licina M., Ataş C., YILDIRIM K., Tanyel Akçit E., ŞİMŞEK E., ÇOBAN A. Y.  
International Europa Scientific Researches Congress, Turkey, 26 February 2023
- IV. **Probiyotikler ve SİBO**  
Pekşen İ. S., Uçaroğlu A. K., Uzuner F., YILDIRIM K., ŞİMŞEK E., ÇOBAN A. Y.  
International Europa Scientific Research Congress, Turkey, 26 February 2023
- V. **İnokulum Miktarı {Mycobacterium tuberculosis} Suşlarının İlaç Duyarlılık Sonuçlarını Gerçekten Etkiliyor mu? Yoksa Bu Sadece Bir Varsayım mı?**  
YILDIRIM K., ATAŞ C., ŞİMŞEK E., ÇOBAN A. Y.  
XL. ULUSLARARASI TÜRK MİKROBİYOLOJİ KONGRESİ, 16 November 2022
- VI. **A New Colorimetric Rapid Antibiotic Susceptibility Test Method for Determining Colistin Resistance in Acinetobacter baumannii Isolates**  
Yıldırım K., Şimşek E., Çoban A. Y., Koyuncu Özyurt Ö., Bozkurt S., Koçak O.  
TMC 2020 Çevrim İçi Mikrobiyoloji Sempozyumu ONLINE, İstanbul, Turkey, 25 - 27 December 2020, pp.22
- VII. **Metamizole could act as an angiogenic factor depending on the interaction of VEGFR2: a molecular docking study**  
Koçak O., ŞİMŞEK E.  
VI. International Congress of Molecular Medicine Molecular Medicine from the, İstanbul, Turkey, 22 - 25 May 2017, pp.123

- VIII. **homology modelling of scara5 protein**  
ŞİMŞEK E., Koçak O., Korkmaz S., Ekşi E.  
4th BAU drug design congress, İstanbul, Turkey, 13 - 15 October 2016, pp.151
- IX. **The transcriptional regulation of gossypol-induced p21 expression via IRF-1 in human breast cancer cells**  
İMİR N., AYDEMİR E., ŞİMŞEK E.  
9th CMAPSEEC, Plovdiv, Bulgaria, 26 - 29 May 2016, pp.125
- X. **CYTOTOXIC EFFECT OF CAPSAICIN on HUMAN CERVICAL CANCER CELL LINE**  
ŞİMŞEK E., AYDEMİR E., İMİR N.  
9th CMAPSEEC, Plovdiv, Bulgaria, 26 - 29 May 2016, pp.154
- XI. **Apoptotic effects of diosmin**  
AYDEMİR E., ŞİMŞEK E., İMİR N.  
9th CMAPSEEC, Plovdiv, Bulgaria, 26 - 29 May 2016, pp.20
- XII. **Substance P: A trivet between cancer, angiogenesis and pain**  
ŞİMŞEK E.  
20th world congress on advances in oncology 18th international symposium on molecular medicine, Atina, Greece, 8 - 10 October 2015, vol.36, no.1, pp.48
- XIII. **Meme Kanseri Hücreleri Üzerinde Ebenus boissierii Ekstraktlarının Sitotoksik ve İmmünomodülatör Etkileri**  
İMİR N., ŞİMŞEK E., AYDEMİR E., Kuruoğlu A., Yeşilada E., FIŞKIN K., GÖKTÜRK R. S.  
22. Ulusal Biyoloji Kongresi, Eskişehir, Turkey, 23 - 27 June 2014, pp.1306
- XIV. **Ebenus boissierii Barbey Ekstraktlarının A549 Hücrelerindeki Sitotoksik ve Apoptotik Etkileri**  
AYDEMİR E., ŞİMŞEK E., İMİR N., Önel B., GÖKTÜRK R. S., Yeşilada E., FIŞKIN K.  
22. Ulusal Biyoloji Kongresi, Eskişehir, Turkey, 23 - 27 June 2014, pp.1252
- XV. **Ebenus boissierii Ekstraktının HeLa Hücreleri Üzerine Sitotoksik Etkileri**  
ŞİMŞEK E., İMİR N., AYDEMİR E., Koçak O., GÖKTÜRK R. S., Yeşilada E., FIŞKIN K.  
22. Ulusal Biyoloji Kongresi, Eskişehir, Turkey, 23 - 27 June 2014, pp.1278
- XVI. **The effects of substance P fragments on breast cancer cells**  
ŞİMŞEK E., AYDEMİR E., KORCUM A. F., FIŞKIN K.  
ASCO Breast Cancer Symposium., San Francisco, United States Of America, 8 - 10 September 2011, pp.295
- XVII. **Meme Kanseri Tedavisinde Substance P Fragmanlarının Rolü.**  
ŞİMŞEK E., KORCUM A. F., AYDEMİR E., FIŞKIN K.  
XIX. Ulusal Kanser Kongresi, Antalya, Turkey, 20 - 24 April 2011, pp.337
- XVIII. **Old substance, an elderly drug, two executioners, and a new scenario**  
ŞİMŞEK E., AYDEMİR E., KORCUM A. F., ERİN N., FIŞKIN K.  
ASCO Breast Cancer Symposium., Washington, United States Of America, 15 - 20 October 2010, pp.303
- XIX. **Combined treatment with radiotherapy and endostatin in breast cancer: Changes in substance P levels by activating ADAM-10, neprilysin.**  
AYDEMİR E., ŞİMŞEK E., KORCUM A. F., ERİN N., FIŞKIN K.  
ASCO Breast Cancer Symposium., Washington, United States Of America, 15 - 20 October 2010, pp.302
- XX. **Threat or treatment?**  
ŞİMŞEK E., AYDEMİR E., FIŞKIN K.  
20. Ulusal Biyoloji Kongresi, Denizli, Turkey, 21 - 25 June 2010, pp.106
- XXI. **In Vitro Cytotoxic Activity of Glycyrrhiza flavescens subsp. antalyensis.**  
Hatipoğlu C., AYDEMİR E., ŞİMŞEK E., GÖKTÜRK R. S., FIŞKIN K.  
20. Ulusal Biyoloji Kongresi, Denizli, Turkey, 21 - 25 June 2010, pp.1014
- XXII. **DMSO is not innocent as we guess**  
ŞİMŞEK E., AYDEMİR E., FIŞKIN K.  
20. Ulusal Biyoloji Kongresi, Denizli, Turkey, 21 - 25 June 2010, pp.105
- XXIII. **Cytotoxic effects of Glycyrrhiza flavescens subsp. Antalyensis on b16f10 mouse melanoma cells.**  
ŞİMŞEK E., AYDEMİR E., GÖKTÜRK R. S., FIŞKIN K.

Pharmacognosy Magazine, Abstracts book of 6th CMAPSEEC, Antalya, Turkey, 20 - 21 April 2010, vol.6, no.22, pp.64-65

- XXIV. **Testing the efficacy of substance P fragments as anti-tumor agents.**  
ŞİMŞEK E., AYDEMİR E., FIŞKIN K., KORCUM A. F., ERİN N., ŞANLIOĞLU S.  
6th AFMC international Medicinal Chemistry Symposium,, İstanbul, Turkey, 8 - 11 July 2007, pp.45
- XXV. **The antimicrobial effect of Glisin**  
ŞİMŞEK E., ODABAŞ KÖSE E., AYDEMİR E.  
18. Ulusal biyoloji Kongresi, Aydın, Turkey, 26 - 30 June 2006, pp.145
- XXVI. **The Antitumoral and Biochemical Effects of Gossypol on Human Lung Cancer Cell Line H1299**  
ŞİMŞEK E., AYDEMİR E., FIŞKIN K.  
ASCB 45th Annual meeting, San Fransisco, United States Of America, 10 - 14 December 2005, pp.44
- XXVII. **The Antitumoral and Biochemical Effects of Gossypol on Human Cervix Cancer Cell Line ME-180**  
Aydemir E., Şimşek E., Fişkin K.  
ASCB 45th Annual meeting, California, United States Of America, 10 - 14 December 2005, pp.60
- XXVIII. **A New Nano-Drug Encapsulation System (Oral Presentation)**  
ŞİMŞEK E., KILIÇ M. A.  
International Biomed 2004 Meeting, Ankara, Turkey, 6 - 11 September 2004, pp.87
- XXIX. **What is Inside it?**  
ŞİMŞEK E., KILIÇ M. A.  
5th international Magnetic Microsphere Meeting, Lyon, France, 20 - 22 May 2004, pp.107

## Supported Projects

ÇOBAN A. Y., ŞİMŞEK E., KOCAOĞLU CENKİ S., ÖZEN KÜÇÜKÇETİN İ., ÇOMAK GÖÇER E. M., KAMARLI ALTUN H., SEREMET KÜRKLÜ N., KENCEBAY MANAS C., ÖZTÜRK O., ÖZGÜN BAŞIBÜYÜK G., et al., Project Supported by Higher Education Institutions, MCF7 İnsan Meme Kanseri Hücre Hattında Serotonin Reseptör Antagonisti Palonosetronun pro ve antianjiyogenik faktörler üzerine etkilerinin in vitro araştırılması, 2018 - 2021

İMİR N., ŞİMŞEK E., AYDEMİR E., Koçak O., Project Supported by Higher Education Institutions, Over kanser hücrelerinde PRIMA1Met tedavisine yanıt olarak miRNA ekspresyon analizi, 2017 - 2019

SÜMBÜL H., ARPAÇ E., BURUNKAYA E., AKARSU M., Kesmez Ö., Gençer A., AYDEMİR E., FIŞKIN K., İMİR N., ŞİMŞEK E., et al., Project Supported by Higher Education Institutions, Fen Fakültesi Araştırma Laboratuvarı Projesi, 2014 - 2016

TUBITAK Project, 4T1 ve 4THMpc fare meme kanseri hücre hatlarında anti-anjiyogenik ilaçlar olan Talidomit ve Endostatin'in tek başlarına ve radyoterapi ile kombine olarak anjiyogenik faktörlerden substance P ve substance P'yi parçalayan ADAM 10 ve Neprilizin enzim aktiviteleri üzerine etkilerinin araştırılması, 2007 - 2009

## Activities in Scientific Journals

NC Nutrition, Committee Member, 2017 - Continues  
Journal of Clinical Oncology, Committee Member, 2016 - Continues

## Scientific Refereeing

Jurnal of clinical Oncology, Other Indexed Journal, March 2017  
Journal of Clinical Oncology, Other Indexed Journal, February 2017  
TUBITAK Project, May 2015

## Metrics

Publication: 56

Citation (WoS): 96

Citation (Scopus): 125

H-Index (WoS): 5

H-Index (Scopus): 6

## **Congress and Symposium Activities**

4th BAU Drug Design Congress, Attendee, İstanbul, Turkey, 2016

the 20th world congress on advances in oncology and 18th international symposium on molecular medicine, Attendee, Atina, Greece, 2015

The 20th world congress on advances in oncology and 18th international symposium on molecular medicine, Session Moderator, Athens, Greece, 2015

## **Scholarships**

EMBO-Short-term- Fellowship, Other International Organizations, 2006 - Continues

## **Awards**

ŞİMŞEK E., Best Scientific Poster, Cleveland Clinic Foundation, May 2004