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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAE-7387-2020.

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Education Information

Doctorate, Istanbul University, İstanbul Tıp Fakültesi/Sağlık Bilimleri Ens/Biyofizik, Turkey 2003 - 2009

Postgraduate, Istanbul University, İstanbul Tıp Fakültesi/Sağlık Bilimleri Ens/Biyofizik, Turkey 2000 - 2003

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Occupational Health and Safety, İŞ GÜVENLİĞİ, halk sağlığı, 2017

Dissertations

Doctorate, DİFTERİ TOKSİNİ ALT BİRİMLERİNİN ELDESİ VE FARKLI HÜCRE SOYLARI ÜZERİNE ETKİLERİ, Istanbul University, Temel Bilimler, Biyofizik, 2009

Postgraduate, SERUMDA ADP-RİBOZİLLENEN PROTEİNLERİN TANIMLANMASI, Istanbul University, Temel Bilimler, Biyofizik, 2003

Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biophysics

Academic Titles / Tasks

Associate Professor, Istanbul University, Istanbul Medical Faculty, Basic Medical Sciences, 2017 - Continues

Research Assistant, Istanbul University, Istanbul Medical Faculty, Basic Medical Sciences, 2001 - 2018

Academic and Administrative Experience

Courses

TIBBİ BİLİMLERE GİRİŞ 1 UYGULAMA, Undergraduate, 2023 - 2024

Advising Theses

Varol B., YENİ SENTEZLENEN AMİNO ANTRAKİNON TÜREVİNİN ANTİKANSER ETKİSİNİN ARAŞTIRILMASI, Postgraduate, H.Çap(Student), Continues

Varol B., Öner B., Formononetin molekülünün osteoblast hücreleri üzerine etkisinin in vitro incelenmesi , Doctorate, D.BAŞARAN(Student), 2020

Jury Memberships

Doctorate, Doctorate, Marmara Üniversitesi, May, 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Depolymerization of actin filaments by Cucurbitacin I through binding G-actin**
Haciosmanoglu Aldogan E., Önsü K. A., Saylan C. C., Günçer B., Baday S., Bektaş M.
FOOD SCIENCE & NUTRITION, vol.12, no.2, pp.881-889, 2024 (SCI-Expanded)
- II. **Jasplakinolid ile F-aktin Stabilizasyonu Uygulanan Endotel Hücrelerinde Difteri Toksini Trafığı**
ÖZERMAN EDİS B., Haciosmanoğlu E., VAROL B., BEKTAŞ M.
Türk Mikrobiyoloji Cemiyeti Dergisi, vol.48, no.3, pp.167-172, 2018 (SCI-Expanded)
- III. **Cross-reacting material 197 (CRM197) affects actin cytoskeleton of endothelial cells**
Edis B., Varol B., Haciosmanoglu E., Unlu A., Bektas M.
GENERAL PHYSIOLOGY AND BIOPHYSICS, vol.36, no.4, pp.383-389, 2017 (SCI-Expanded)
- IV. **Interleukin-1 β effect on the endogenous ADP-ribosylation and phosphorylation of eukaryotic elongation factor 2**
HACIOSMANOĞLU E., Varol B., Edis B., Bektaş M.
Cytotechnology, vol.68, no.6, pp.2659-2666, 2016 (SCI-Expanded)
- V. **Clinical significance of serum ADP-ribosylation and NAD glycohydrolase activity in patients with colorectal cancer.**
Varol B., ÇOŞKUN Ö., Karabulut S., SERİN K. R., Asoglu O., Albeniz I., Tas F., Nurten R.
Tumour biology : the journal of the International Society for Oncodevelopmental Biology and Medicine, vol.35, no.6, pp.5575-82, 2014 (SCI-Expanded)
- VI. **The cytotoxic effect of diphtheria toxin on the actin cytoskeleton**
Varol B., Bektas M., Nurten R., Bermek E.
CELLULAR & MOLECULAR BIOLOGY LETTERS, vol.17, no.1, pp.49-61, 2012 (SCI-Expanded)
- VII. **On diphtheria toxin fragment A release into the cytosol-Cytochalasin D effect and involvement of actin filaments and eukaryotic elongation factor 2.**
BEKTAŞ M., Haciosmanoğlu E., ÖZERMAN EDİS B., VAROL B., NURTEN R.
Int J Biochem Cell Biol., no.43, pp.1365-72, 2011 (SCI-Expanded)
- VIII. **On diphtheria toxin fragment A release into the cytosol - Cytochalasin D effect and involvement of actin filaments and eukaryotic elongation factor 2**
Bektas M., Haciosmanoglu E., Ozerman B., Varol B., Nurten R., Bermek E.
International Journal of Biochemistry and Cell Biology, vol.43, no.9, pp.1365-1372, 2011 (SCI-Expanded)

- IX. **Interaction of diphtheria toxin (fragment A) with actin**
Bektas M., Varol B., Nurten R., Bermek E.
CELL BIOCHEMISTRY AND FUNCTION, vol.27, no.7, pp.430-439, 2009 (SCI-Expanded)
- X. **Actin -: an inhibitor of eukaryotic elongation factor activities**
Bektas M., Guncer B., Guven C., Nurten R., Bermek E.
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, no.4, pp.1061-1066, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. **Indomethacin Affects the Inflammatory Response via Interaction with the RhoA-Actin Cytoskeleton in THP-1 Cells**
HACIOSMANOĞLU E., DAL YÖNTEM F., BULUT Ş., YAPIŞLAR H., GÜNÇER B., BEKTAŞ M.
Experimed, vol.13, no.3, pp.213-217, 2023 (Scopus)
- II. **Synthesis of New Anthraquinone Derivatives and Anticancer Effects on Breast Cancer Cell Lines**
Haciosmanoğlu E., ÖZKÖK F., Onsu A. K., BEKTAŞ M., VAROL B., PEHLİVAN S.
The Eurasia Proceedings of Science, Technology, Engineering & Mathematics (EPSTEM), vol.4, pp.271-276, 2018 (Peer-Reviewed Journal)
- III. **Intracellular trafficking of diphtheria toxin and its mutated form, CRM197, in the endocytic pathway**
Edis B., Haciosmanoglu E., Varol B., Bektas M.
NORTHERN CLINICS OF ISTANBUL, vol.5, no.2, pp.89-95, 2018 (ESCI)
- IV. **Intracellular trafficking of diphtheria toxin and its mutated form (CRM197) in the endocytic pathway**
ÖZERMAN EDİS B., Haciosmanoğlu E., VAROL B., BEKTAŞ M.
NORTHERN CLINICS OF ISTANBUL, vol.4, 2017 (Peer-Reviewed Journal)
- V. **İstanbul Tıp Fakültesinde 31 Yıllık Bilimsel Araştırma Sonuçları**
TEFIK T., VAROL B., ÖZERMAN EDİS B., BEKTAŞ M., KADIOĞLU A.
Yükseköğretim Dergisi/Journal of Higher Education, vol.3, no.1, pp.53-60, 2013 (Peer-Reviewed Journal)
- VI. **31 Yıllık Bilimsel Araştırma Sonuçları**
VAROL B.
yükseköğretim, vol.3, pp.53-60, 2013 (Peer-Reviewed Journal)
- VII. **Eritrosit Endotel Hücre Etkileşimlerinde CD38 ve CD31'in Rolü.**
VAROL B.
cardiovascular sciences, vol.23, pp.212-220, 2011 (Peer-Reviewed Journal)
- VIII. **İstanbul Tıp Fakültesini kazanan öğrencilere uygulanan anket sonuçları:2001-2002 eğitim öğretim yılı sonuçları**
NURTEN R., VAROL B.
Tıp Eğitim Dünyası, İstanbul Tıp Fakültesi, no.6, pp.29-32, 2002 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Bütünleştirilmiş Moleküler Ve Hüresel Biyofizik**
Nurten A., Albeniz I., Yalçıntepe Güneştutar L., Akçakaya H., Bektaş M., Varol B., Özerman Edis B., Türker Şener L., Nurten R. (Editor)
İstanbul Tıp Kitabevi, İstanbul, 2014
- II. **Toxin Structure, Delivery and Action**
Varol B., Özerman Edis B., Bektaş M.
in: Corynebacterium diphtheriae and Related Toxigenic Species: Genomics, Pathogenicity and Applications, Varol B., Özerman Edis B., Bektaş M., Editor, Springer Netherlands, İstanbul, pp.83-94, 2013

Refereed Congress / Symposium Publications in Proceedings

- I. **Impact of informational meetings on PhD candidates 'Awareness of ORPHEUS standards : A pretest-post test Analysis**
Sırma Ekmekci S., Soluk Tekkeşin M., Erdal M. S., Bayrak A. E., Günçer B., Oyacı Y., Güldiken Y.
Orpheus 2024 , Tbilisi, Georgia, 18 - 20 April 2024, pp.58-59
- II. **The role of technology and large language models in PhD Education: An innovation and integration survey for PhD candidates**
Günçer B., Soluk Tekkeşin M., Erdal M. S., Bayrak A. E., Sırma Ekmekci S., Oyacı Y., Güldiken Y.
Orpheus 2024, Tbilisi, Georgia, 18 - 20 April 2024, pp.67-68
- III. **Perceptions and expectations on the integration of thechnology and large language models in PhD education: A comperative study of PhD candidates and supervisors**
Oyacı Y., Soluk Tekkeşin M., Erdal M. S., Bayrak A. E., Sırma Ekmekci S., Günçer B., Güldiken Y.
Orpheus 2024 Conference, Tbilisi, Georgia, 18 - 20 April 2024, pp.43-44
- IV. **A Novel Molecule For Lung Cancer Treatment: Curcumin-Quinone Derivative**
Özkök F., Haciosmanoğlu E., Oyacı Y., Varol B., Onul N., Pehlivan S.
III. International Cancer And Ion Channels Congress, İstanbul, Turkey, 16 - 18 September 2021, pp.60
- V. **Evaluation of in vitro cytotoxicity of root repair materials on 3T3 cells**
KASIMOĞLU Y., VAROL B., Tuna B. E., Karşlı E., SEYMEN F., GENÇAY K.
13th Congress of the European Academy of Paediatric Dentistry, Serbia And Montenegro, pp.1
- VI. **Development of thermal shift assay via nucleotide binding on actin cytoskeleton**
Önsü A. K., Haciosmanoglu E., Varol B., Bektaş M.
30th Annual Biophysics Congress, Muğla, Turkey, 10 - 13 October 2018, pp.26
- VII. **Examination of Cytotoxic and Apoptotic Effects in Pulp Capping Materials used in Dentistry**
Bektaş I., TUNA İNCE E. B., VAROL B., KORUYUCU M., KASIMOĞLU Y., Önsü K. A.
Istanbul University Faculty of Dentistry Students' Research Club 25th Scientific Meeting, İstanbul, Turkey, 9 - 11 May 2018, pp.1
- VIII. **Dişhekimliğinde kullanılan kuafaj materyallerinin sitotoksik ve apoptotik özelliklerinin incelenmesi.**
Bektaş I., TUNA İNCE E. B., VAROL B., KORUYUCU M., KASIMOĞLU Y., Önsü K. A.
İstanbul Üniversitesi Diş Hekimliği Fakültesi Araştırma Kulübü 25. Bilimsel Toplantısı, İstanbul, Turkey, 9 - 11 May 2018, pp.1
- IX. **Endositoz sürecinde mutant difteri toksini (CRM197) ile aktin etkileşimi**
ÖZERMAN EDİS B., Haciosmanoğlu E., Ünlü A., VAROL B., BEKTAŞ M.
28-29 ulusal Biyofizik Kongresi, İstanbul, Turkey, 6 - 09 September 2017, pp.129
- X. **Evaluation of in vitro cytotoxicity of Root repair materials on 3T3 cells**
KASIMOĞLU Y., VAROL B., TUNA İNCE E. B., Karşlı E., SEYMEN F.
13th Congress of the European Academy of Paediatric Dentistry, Belgrad, Serbia And Montenegro, 2 - 05 June 2016, pp.304
- XI. **LPS ile İndüklenen THP-1 Hücre Soyunda Kolşisinin Matriks Metalloproteinaz Aktivitelerine Etkisi**
VAROL B., haciosmanoğlu e., BEKTAŞ M., NURTEN R.
27. ULUSAL BİYOFİZİK KONGRESİ, Malatya, Turkey, 29 September - 03 October 2015, pp.155-156
- XII. **Kinetics and modeling of diphtheria toxin (FA) and actin interaction**
VAROL B., ünlü a., haciosmanoğlu e., BEKTAŞ M., NURTEN R.
10th European Biophysics Congress, Dresden, Germany, 18 - 22 July 2015, pp.30
- XIII. **ADP-Ribozilleyen Toksinler, Hücre İskeleti ve Protein Sentezi**
VAROL B., ÖZERMAN EDİS B., haciosmanoğlu e., BEKTAŞ M., NURTEN R.
26. ULUSAL BİYOFİZİK KONGRESİ, Tokat, Turkey, 9 - 12 September 2014, pp.24-25
- XIV. **Joint meeting of the Federation of European Physiological Societies (FEPS) and the Hungarian Physiological Society**
Haciosmanoğlu E., VAROL B., ÖZERMAN EDİS B., BEKTAŞ M., NURTEN R.
Release of Diphtheria Toxin Fragment A (FA) from early endosomes into the cytosol., Budapeşte, Hungary, 28 - 30

August 2014, pp.122

- XV. **Evaluation of the cytotoxic effect of Diphtheria toxin on human umbilical vein endothelial cells.**
VAROL B., ÖZERMAN EDİS B., Hacıosmanoğlu E., BEKTAŞ M., NURTEN R.
Joint meeting of the Federation of European Physiological Societies (FEPS) and the Hungarian Physiological Society, Budapeşte, Hungary, 27 - 30 August 2014, pp.168
- XVI. **Intracellular Trafficking of Diphtheria Toxin Mutant CRM197**
ÖZERMAN EDİS B., VAROL B., Hacıosmanoğlu E., BEKTAŞ M., NURTEN R.
3rd International Congress of Molecular Biology and Biotechnology, Saraybosna, Bosnia And Herzegovina, 2 - 06 June 2014, pp.26
- XVII. **Mutant Difteri Toksini CRM 197'nin Hücre İçi Dağılımı.**
ÖZERMAN EDİS B., Hacıosmanoğlu E., Öztürk G., VAROL B., BEKTAŞ M., NURTEN R.
25. Ulusal Biyofizik Kongresi Bildiri Özet Kitabı, P12, Trabzon, 24-27 Eylül (2013)., Trabzon, Turkey, 24 - 27 September 2013, pp.55
- XVIII. **The actin cytoskeleton is involved in the endocytic process of diphtheria toxin transport**
ÖZERMAN EDİS B., VAROL B., HACIOSMANOĞLU E., BEKTAŞ M., NURTEN R.
Novel Biophysical Approaches in the Investigation of the Cytoskeleton .The 27th European Cytoskeletal Forum Meeting, Pecs, Hungary, 3 - 07 November 2012, pp.105
- XIX. **Effect of diphtheria toxin on cytoskeleton and protein synthesis**
Guncer B., Bektas M., Nurten R.
31st Congress of the Federation-of-European-Biochemical-Societies (FEBS), İstanbul, Turkey, 24 - 29 June 2006, pp.342

Other Publications

- I. **Rektum Kanserli Hastalarda Serum ADP-ribozillenme ve Matris Metalloproteinaz Etkinliklerinin Değerlendirilmesi**
VAROL B., ALBENİZ I., NURTEN R.
Presentation, pp.60, 2014

Supported Projects

- ÖNER B., VAROL B., BAŞARAN D., Project Supported by Higher Education Institutions, Formononetin molekülünün osteoblast hücreleri üzerine etkisinin in vitro incelenmesi, 2018 - Continues
- Varol B., Pehlivan S., Özkök F., Hacıosmanoğlu E., Özerman Edis B., Şahin Y. M., Onul N., Yapışlar H., Ekenel M., Bektaş M., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Investigation of anticancer mechanisms of newly synthesized curcumin analogs on Glioblastoma treatment. , 2021 - 2022
- VAROL B., ÇAP H., Project Supported by Higher Education Institutions, Yeni sentezlenen amino antrakinon türevinin antikanser etkisinin araştırılması, 2020 - 2021
- BEKTAŞ M., VAROL B., HACIOSMANOĞLU E., Project Supported by Higher Education Institutions, Ökaryotik Eleongasyon Faktör 2 Aktivitesine Ekstraselüler ATP'nin Etkisi, 2017 - 2018
- Varol B., Özerman Edis B., Hacıosmanoğlu E., Bektaş M., Gül A., Project Supported by Higher Education Institutions, Ailesel Akdeniz Ateşi Hastalarında Kolşisin Tedavisinin, Hücre İskeleti Öğeleri ve eEF2, 2013 - 2017
- GÜNÇER B., Project Supported by Higher Education Institutions, Ailesel Akdeniz Ateşi Hastalarında Kolşisin Tedavisinin, Hücre İskeleti Öğeleri ve eEF2 Aktivitesindeki Değişiklikler Bağlamında Araştırılması., 2013 - 2017
- GÜNÇER B., Project Supported by Higher Education Institutions, LPS İLE İNDÜKLENEN THP-1 HÜCRE SOYUNDA KOLŞİSİNİN MATRİKS METALLOPROTEİNAZ AKTİVİTELERİNE ETKİSİ, 2015 - 2016
- GÜNÇER B., Project Supported by Higher Education Institutions, Difteri toksini (FA) ve aktin etkileşiminin kinetiği ve modellenmesi, 2015 - 2015
- GÜNÇER B., Project Supported by Higher Education Institutions, ADP-Ribozilleyen Toksinler, Hücre İskeleti ve Protein

Sentezi, 2014 - 2014

GÜNÇER B., Project Supported by Higher Education Institutions, İnsan Göbek Kordonu Endotel Hücrelerinde (HUVEC)

Difteri Toksininin Sitotoksik Etkisinin Araştırılması, 2014 - 2014

GÜNÇER B., Project Supported by Higher Education Institutions, Difteri Toksini (FA)'nın sitozolden salınımında Sitokalsin D'nin rolü, 2011 - 2013

Bektaş M., Varol B., Albeniz I., Türker Şener L., TÜBİTAK Project, Difteri toksini bağlamında apoptotik hücre modeli oluşturma ve toksinin sitotoksik etkisinin araştırılması, 2007 - 2009

VAROL B., TÜBİTAK Project, Difteri toksini bağlamında apoptotik hücre modeli oluşturma ve, 2007 - 2009

Patent

Günçer B., Pehlivan S., Özkök F., Onul N., KANSER HÜCRELERİNİ BASKILAYICI ÖZGÜN KURKUMİN ANALOĞU, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: TR 2020 22499 B , Standard Registration, 2023

Activities in Scientific Journals

Sabiad , Assistant Editor/Section Editor, 2023 - Continues

Memberships / Tasks in Scientific Organizations

Biophysical Society, Member, 2003 - Continues

Türk Biyofizik Derneği, Member, 2001 - Continues

Scientific Refereeing

Tumor Biology, SCI Journal, January 2016

Biochemistry and Biotechnology Research, Other Indexed Journal, November 2015

Metrics

Publication: 40

Citation (WoS): 54

Citation (Scopus): 56

H-Index (WoS): 7

H-Index (Scopus): 4

Congress and Symposium Activities

28.-29.Ulusal Biyofizik kongresi, Attendee, İstanbul, Turkey, 2017

2nd International Congress of the Molecular Biology Association of Turkey, Attendee, Turkey, 2013

25.Ulusal Biyofizik Kongresi, Attendee, Turkey, 2013

27th European Cytoskeletal Forum Meeting, Attendee, Hungary, 2012

23.Ulusal Biyofizik kongresi, Attendee, Edirne, Turkey, 2011

Turkish-FEPS Physiology Congress, Attendee, Turkey, 2011

22.Ulusal Biyofizik Kongresi, Attendee, Aydın, Turkey, 2010

20. Ulusal Biyofizik Kongresi, Attendee, Mersin, Turkey, 2008

- 19.Ulusal Biyofizik Kongresi, Attendee, Konya, Turkey, 2007
- 5.Tıbbi Biyolojik Bilimler Öğrenci Sempozyumu, Attendee, İstanbul, Turkey, 2006
- 17.Ulusal Biyofizik Kongresi, Attendee, İzmir, Turkey, 2005
- 16.Ulusal Biyofizik Kongresi, Attendee, Ankara, Turkey, 2004
- 15.Ulusal Biyofizik Kongresi, Attendee, Denizli, Turkey, 2003

Scholarships

Araştırma bursu, TUBİTAK, 2005 - Continues