

## Asst. Prof. ŞEYDA BERK



### Personal Information

**Office Phone:** [+90 346 219 1010](tel:+903462191010) Extension: 2968

**Email:** [sberk@cumhuriyet.edu.tr](mailto:sberk@cumhuriyet.edu.tr)

**Web:** <https://avesis.cumhuriyet.edu.tr/sberk>



### International Researcher IDs

ScholarID: yw3H7EAAAAAJ

ORCID: 0000-0003-4687-0223

Publons / Web Of Science ResearcherID: AAA-4789-2020

ScopusID: 37116506200

Yoksis Researcher ID: 53978

### Education Information

Doctorate, Sivas Cumhuriyet University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik (Dr), Turkey 2012 - 2018

Postgraduate, Sivas Cumhuriyet University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik (YI) (Tezli), Turkey 2009 - 2012

Postgraduate, Hacettepe University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 2001 - 2007

### Foreign Languages

German, B2 Upper Intermediate

English, C1 Advanced

### Certificates, Courses and Trainings

Health&Medicine, INVESTIGATION OF THE RELATIONSHIP BETWEEN GLUCOSE AND INSULIN/INSULIN-LIKE GROWTH FACTORS IN COLORECTAL CANCER STEM CELLS, Erciyes University, Genom and Stem Cell Center (Kayseri/Turkey), 2016

Foreign Language, English B2.2 Upper-Intermediate 2, Erasmus University (Rotterdam/The Netherlands), 2015

Health&Medicine, INVESTIGATION OF THE RELATIONSHIP BETWEEN GLUCOSE AND INSULIN/INSULIN-LIKE GROWTH FACTORS IN COLORECTAL CANCER CELLS - Erasmus Student Internship Mobility, Erasmus Medical Center (Rotterdam/The Netherlands), 2014

Health&Medicine, The training seminar of the applied live cell imaging and cell analysis system, Sivas Cumhuriyet Üniversitesi, 2014

Foreign Language, English Speaking Course-ABIGEM, Sivas Cumhuriyet University, 2013

### Dissertations

Doctorate, Interplay between glucose and insulin/insulin-like growth factors in colorectal cancer (stem) cells. Thesis

ID:490254 (in English), Sivas Cumhuriyet University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik, 2017  
Postgraduate, Determination of the antioxidant, antimicrobial and DNA damage protection potentials of Myrtus communis, Pistacia vera, Arum maculatum, Ceterach officinarum, Inula oculus-christi.. Thesis ID:302651, Sivas Cumhuriyet University, Moleküler Biyoloji Ve Genetik (YI) (Tezli), 2012

## Research Areas

Health Sciences, Medical Biology, Molecular Biology and Genetics, Natural Sciences

## Academic Titles / Tasks

Assistant Professor, Sivas Cumhuriyet University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, 2018 - Continues  
Assistant Professor, Addis Ababa University, Fen Fakültesi, Biyoloji, 2021 - 2021  
Research Assistant PhD, Université Abdelmalek Essaâdi (Tétouan/Morocco), 2018 - 2018  
Research Assistant PhD, Sivas Cumhuriyet University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, 2018 - 2018  
Research Assistant, Erciyes University, 2016 - 2017  
Research Assistant, Sivas Cumhuriyet University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, 2010 - 2017  
Research Assistant, Erasmus Universiteit Rotterdam, Erasmus Medical Center (Erasmus Mc), Internal Medicine, 2014 - 2016

## Academic and Administrative Experience

Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Moleküler Biyoloji ve Genetik Bölümü, 2015 - Continues  
Deputy Head of Department, Sivas Cumhuriyet University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, 2019 - 2020  
Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Moleküler Biyoloji ve Genetik Bölümü, 2012 - 2014

## Courses

Seminar Course, Postgraduate, 2019 - 2020, 2020 - 2021, 2021 - 2022  
BASIC CELL CULTURE TECHNIQS, Postgraduate, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022  
DEVELOPMENTAL BIOLOGY, Undergraduate, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022  
CELL CULTURE AND APPLICATIONS, Undergraduate, 2018 - 2019, 2020 - 2021, 2021 - 2022  
Bachelor Thesis, Undergraduate, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022  
CAREER PLANNING, Undergraduate, 2021 - 2022  
MASTER'S THESIS, Postgraduate, 2020 - 2021, 2021 - 2022  
MOLECULAR DIAGNOSIS METHODS, Undergraduate, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022  
STEM CELL ISOLATION, CHARACTERIZATION AND CULTURE TECHNIQS, Postgraduate, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022  
Growth Factors and IGF System, Postgraduate, 2019 - 2020, 2020 - 2021  
STEM CELL BIOLOGY, Undergraduate, 2018 - 2019, 2019 - 2020, 2021 - 2022  
CYTOGENETIC, Undergraduate, 2018 - 2019, 2019 - 2020, 2021 - 2022  
HUMAN GENETICS AND CANCER BIOLOGY, Undergraduate  
BIOINFORMATICS, Undergraduate, 2018 - 2019  
SIGNAL TRANSMISSION SYSTEMS , Undergraduate, 2017 - 2018

## Advising Theses

Berk Ş., Investigation of the effects of insulin/insulin-like growth factors in the nematode *Caenorhabditis elegans* (C. elegans) model organism.eri etkilerinin araştırılması, Postgraduate, H.Osman(Student), Continues

Berk Ş., Investigation of the role of mTOR inhibitors in the nematode *Caenorhabditis elegans* (C. elegans) model organism., Postgraduate, T.Demirel(Student), Continues

Berk Ş., IDENTIFICATION OF ENDOGENIC REFERENCE GENES FOR REAL-TIME RT-QPCR NORMALIZATION IN *Blaptica dubia* (SERVILLE, 1838) (BLATTIDAE, BLABERINAE) AND ASSESSMENT OF EXPRESSION STABILITY, Postgraduate, E.UFUK(Student), 2022

Berk Ş., IDENTIFICATION AND VALIDATION OF REFERENCE GENES FOR RT-qPCR NORMALIZATION IN *Nauphoeta cinerea* (OLIVIER, 1789) (BLATTODEA, BLABERIDAE), Postgraduate, K.ÖZCAN(Student), 2022

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

- I. **A comprehensive and current review on the role of flavonoids in lung cancer–Experimental and theoretical approaches**  
BERK Ş., KAYA S., Akkol E. K. , BARDAKCI H.  
Phytomedicine, vol.98, 2022 (Peer-Reviewed Journal)
- II. **Modifying Effects of Glucose and Insulin/Insulin-Like Growth Factors on Colon Cancer Cells**  
Berk Ş., Janssen J. A. M. J. L. , Van Koetsveld P. M. , Dogan F., Değerli N., Özcan S., Kelestimur F., Hofland L. J.  
FRONTIERS IN ONCOLOGY, vol.11, 2021 (Peer-Reviewed Journal)
- III. **Amoebicidal activity of the rhizomes and aerial parts of *Allium sivasicum* on *Entamoeba histolytica***  
Degerli S., Berk Ş., Tepe B., Malatyali E.  
PARASITOLOGY RESEARCH, vol.111, no.1, pp.59-64, 2012 (Peer-Reviewed Journal)
- IV. **In vitro amoebicidal activities of *Satureja cuneifolia* and *Melissa officinalis* on *Acanthamoeba castellanii* cysts and trophozoites**  
Malatyali E., Tepe B., Degerli S., Berk Ş.  
PARASITOLOGY RESEARCH, vol.110, no.6, pp.2175-2180, 2012 (Peer-Reviewed Journal)
- V. **In vitro amoebicidal activities of *Teucrium polium* and *T. chamaedrys* on *Acanthamoeba castellanii* trophozoites and cysts**  
TEPE B., MALATYALI E., DEĞERLİ S., BERK Ş.  
PARASITOLOGY RESEARCH, vol.110, no.5, pp.1773-1778, 2012 (Peer-Reviewed Journal)
- VI. **In vitro amoebicidal activity of *Origanum syriacum* and *Origanum laevigatum* on *Acanthamoeba castellanii* cysts and trophozoites**  
DEĞERLİ S., TEPE B., ÇELİKSÖZ A., BERK Ş., MALATYALI E.  
EXPERIMENTAL PARASITOLOGY, vol.131, no.1, pp.20-24, 2012 (Peer-Reviewed Journal)
- VII. **Screening of the in vitro amoebicidal activities of *Pastinaca armena* (Fisch & CAMEy.) and *Inula oculus-christi* (L.) on *Acanthamoeba castellanii* cysts and trophozoites**  
DEĞERLİ S., BERK Ş., MALATYALI E., TEPE B.  
PARASITOLOGY RESEARCH, vol.110, no.2, pp.565-570, 2012 (Peer-Reviewed Journal)
- VIII. **In vitro amoebicidal activity of four *Peucedanum* species on *Acanthamoeba castellanii* cysts and trophozoites**  
MALATYALI E., TEPE B., DEĞERLİ S., BERK Ş., AKPULAT H. A.  
PARASITOLOGY RESEARCH, vol.110, no.1, pp.167-174, 2012 (Peer-Reviewed Journal)
- IX. **Screening of the antioxidant, antimicrobial and DNA damage protection potentials of the aqueous extract of *Inula oculus-christi***  
BERK Ş., TEPE B., ARSLAN S.  
AFRICAN JOURNAL OF PHARMACY AND PHARMACOLOGY, vol.5, no.14, pp.1695-1702, 2011 (Peer-Reviewed Journal)
- X. **Screening of the antioxidant, antimicrobial and DNA damage protection potentials of the aqueous**

**extract of *Asplenium ceterach* DC**

BERK Ş., TEPE B., ARSLAN S., Sarikurkcu C.

AFRICAN JOURNAL OF BIOTECHNOLOGY, vol.10, no.44, pp.8902-8908, 2011 (Peer-Reviewed Journal)

- XI. **Chemical Composition, Radical Scavenging and Antimicrobial Activity of the Essential Oils of *Thymus boveii* and *Thymus hyemalis***  
TEPE B., Sarikurkcu C., BERK Ş., Alim A., AKPULAT H. A.  
RECORDS OF NATURAL PRODUCTS, vol.5, no.3, pp.208-220, 2011 (Peer-Reviewed Journal)

### Articles Published in Other Journals

- I. **Selection and Validation of Potential Reference Genes for Quantitative Real-Time PCR Analysis in *Blaptica Dubia* (Serville, 1838) (Blattidae, Blaberidae)**  
KARAKAŞ E. U. , PEKTAŞ A. N. , BERK Ş.  
CUMHURİYET SCIENCE JOURNAL, vol.43, no.2, pp.176-182, 2022 (Peer-Reviewed Journal)
- II. **Identification and Validation of Reference Genes for RT-qPCR Normalization in *Nauphoeta cinerea* (Olivier, 1789) (Blattodea, Blaberidae)**  
ÖZCAN K., PEKTAŞ A. N. , BERK Ş.  
Bilge International Journal of Science and Technology Research, vol.6, no.1, pp.62-72, 2022 (Peer-Reviewed Journal)
- III. **Selection and Validation of Reference Genes for Quantitative Real-time PCR in the Mealworm Beetle, *Tenebrio molitor*L. (Coleoptera: Tenebrionidae)**  
Berk Ş., Pektaş A. N.  
IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS) (2020), vol.13, pp.44-50, 2020 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **CAENORHABDİTİS ELEGANS: A MODEL SYSTEM FOR CANCER RESEARCH**  
BERK Ş.  
II-INTERNATIONAL CONFERENCE ON GLOBAL PRACTICE OF MULTIDISCIPLINARY SCIENTIFIC STUDIES, Batumi, Georgia, 26 - 28 July 2022, pp.857-866
- II. **CHARACTERISTICS OF CANCER STEM CELLS AS THERAPEUTIC TARGETS**  
BERK Ş.  
INTERNATIONAL CAPITAL CONFERENCE ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH, Lisbon, Portugal, 13 - 14 July 2022, pp.129-136
- III. **THREE-DIMENSIONAL CELL CULTURE SYSTEMS IN CANCER RESEARCH**  
Berk Ş.  
2. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS, Nevşehir, Turkey, 17 - 19 June 2022, pp.462-478
- IV. **BIOMATERIALS FOR ORGANOID MODELING AND TUMOR SPHEROIDS**  
Berk Ş.  
5th INTERNATIONAL CONFERENCE ON PHYSICAL CHEMISTRY AND FUNCTIONAL MATERIALS, Sivas, Turkey, 23 - 25 June 2022, pp.57-63
- V. **Investigation of *Punica granatum* and *Olea europaea* for their cytotoxic activity**  
Ergül M., Ergül M., Berk Ş., Baltaş H., Altun A.  
22. Ulusal Farmakoloji Kongresi, Antalya, Turkey, 4 - 07 November 2013
- VI. **Investigation of the phenolic acid content, cytotoxic and DNA damage protection potentials of *Thymus herba-borano***  
Ergül M., Berk Ş., Ergül M., Baltaş H., Altun A.

22. Ulusal Farmakoloji Kongresi, Antalya, Turkey, 4 - 07 November 2013
- VII. **Investigation of phenolic acid content, cytotoxic and DNA damage protection potentials of *Lycopodium clavatum***  
Berk Ş., Ergül M., Ergül M., Baltaş H., Altun A.  
22. Ulusal Farmakoloji Kongresi, Antalya, Turkey, 4 - 07 November 2013
- VIII. **Investigation of *Punica granatum* and *Olea europaea* for their phenolic acid content and DNA damage protection potentials.**  
Berk Ş., Ergül M., Ergül M., Baltaş H., Altun A.  
22. Ulusal Farmakoloji Kongresi, Antalya, Turkey, 4 - 07 November 2013
- IX. **Thymus herba barona türünün sitotoksik ve DNA koruyucu aktivitelerinin araştırılması**  
ERGÜL M., BERK Ş., ERGÜL M., BALTAŞ H.  
25. Ulusal Biyokimya Kongresi, İzmir, Turkey, 3 - 06 September 2013
- X. **Investigation of the cytotoxic and DNA damage protection potentials of *O. syriacum* and *S. tomentosa***  
Ergül M., Berk Ş., Ergül M., Baltaş H., Tutar Y.  
25. Ulusal Biyokimya Kongresi, İzmir, Turkey, 3 - 06 September 2013
- XI. **Investigation of antioxidant antimicrobial and DNA protective activities of *Myrtus communis* *Ceterach officinarum* *Inula oculus christi*.**  
Berk Ş., Çetinkaya S., Harun B., Hüsünet M. T. , Çilkiz M., Tepe B.  
2. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Antalya, Turkey, 15 - 18 November 2012
- XII. **Screening of antimicrobial, antioxidant and DNA damage protection potentials of *Pistacia khinjuk***  
Karagöz I. D. , Kiliç I. H. , Çakmak A., Tepe B., Hüsünet M. T. , Çilkiz M., Akgül H., Özaslan M., Berk Ş.  
. 21. Ulusal Biyoloji Kongresi, İzmir, Turkey, 3 - 07 September 2012
- XIII. **Screening of antimicrobial, antioxidant and DNA damage protection potentials of *Pistacia vera***  
Mustafa Ç., Kiliç I. H. , Tepe B., Karagöz I. D. , Hüsünet M. T. , İşler D., Berk Ş., Bozkurt Güzel Ç., Akgül H., Özaslan M.  
21. Ulusal Biyoloji Kongresi, İzmir, Turkey, 3 - 07 September 2012

## Supported Projects

- Berk Ş., Çetin A., Durna Daştan S., Yurtcu N., Özdemir N. Ü. , Project Supported by Higher Education Institutions, Investigation of the effects of the antidiabetic drug metformin and the dual IGF1 / insulin receptor antagonist OSI-906 in the nematode *Caenorhabditis elegans* model and determination of the expression levels of insulin / IGF-1 signaling (IIS) pathway components, 2021 - 2024
- Berk Ş., Kaleli R., Başyıldız B., TÜBİTAK Project, İnsülin ve insülin benzeri büyüme faktörü 1 reseptörlerinin (IR/IGF-IR) inhibitörü olan OSI-906 ve mTOR inhibitörlerinin (rapamycin, everolimus, temsirolimus) kombinasyonlarının *Caenorhabditis elegans*'ın yaşlanma üzerindeki etkilerinin araştırılması ve insulin/insulin-benzeri büyüme faktörü (IGF) ve mTOR yolu bileşenlerin gen ekspresyon seviyelerinin belirlenmesi, 2022 - 2023
- Berk Ş., Yurt K., Özdemir N. Ü. , TÜBİTAK Project, Nematod *Caenorhabditis elegans* modelinde gerçek zamanlı RT-qPCR ile kantitatif insulin/insulin-benzeri büyüme faktörü (IGF) ve mTOR yolu bileşenlerin gen ekspresyon analizi için güvenilir referans genlerin seçimi ve doğrulanması, 2022 - 2023
- Berk Ş., Karasakız E., TÜBİTAK Project, Antidiyabetik ilaç olan metformin ve mTOR inhibitörlerin (rapamycin, everolimus, temsirolimus) kombinasyonlarının Nematod *Caenorhabditis elegans* modelinde yaşlanma üzerindeki etkilerinin araştırılması ve mTOR yolu bileşenlerin gen ekspresyon seviyelerinin belirlenmesi, 2022 - 2023
- Berk Ş., Demirel T., Project Supported by Higher Education Institutions, Nematod *Caenorhabditis elegans* (*C. elegans*) model organizmasında mTOR inhibitörlerin rolünün araştırılması, 2021 - 2023
- Berk Ş., Caymaz H. O. , Project Supported by Higher Education Institutions, Nematod *Caenorhabditis elegans* (*C. elegans*) model organizmasında insülin/insülin benzeri büyüme faktörleri etkilerinin araştırılması, 2021 - 2023
- Yurtcu N., Durna Daştan S., Özkaraca M., Çetin A., Berk Ş., TÜBİTAK Project, Effect of VEGFR1-3 kinase inhibitor Fruquiniib in a Rat Intra-Abdominal Endometriosis Model: The Role of VEGF/VEGFR and HIPPO-YAP Molecules, 2021 - 2022
- BERK Ş., Project Supported by Higher Education Institutions, Ülkemizde yetişen bazı bitki türlerinin anti parazitik ve DNA

## Scientific Refereeing

Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, June 2021  
TÜRK DOĞA VE FEN DERGİSİ, National Scientific Refreed Journal, April 2021  
TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Sivas Cumhuriyet University, Turkey, February 2020  
Türk Biyoçeşitlilik Dergisi, Other Journals, October 2019  
Turkish Journal of Agriculture - Food Science and Technology, Other Indexed Journal, October 2019  
Cumhuriyet Science Journal, National Scientific Refreed Journal, February 2019  
Sinop Üniversitesi Fen Bilimleri Dergisi, Other Journals, February 2019  
Cumhuriyet Science Journal, National Scientific Refreed Journal, October 2018  
Cumhuriyet Science Journal, National Scientific Refreed Journal, February 2018  
Pharmaceutical Biology, SCI Journal, March 2014  
PHARMACEUTICAL BIOLOGY, SCI Journal, February 2014  
PHARMACEUTICAL BIOLOGY, SCI Journal, November 2013  
PHARMACEUTICAL BIOLOGY, SCI Journal, September 2013

## Mobility Activity

Erasmus Programme, Lecturing, Addis Ababa University, Ethiopia, 2021 - 2021  
Erasmus Programme, Lecturing, Université Abdelmalek Essadi, Morocco, 2018 - 2018  
Other, Research During Graduate Education, Erciyes University, Turkey, 2016 - 2017  
Erasmus Programme, Student Mobility, Erasmus Universiteit Rotterdam, Netherlands, 2014 - 2015

## Metrics

Publication: 27  
Citation (WoS): 247  
Citation (Scopus): 206  
H-Index (WoS): 8  
H-Index (Scopus): 6

## Congress and Symposium Activities

Novel Developments in the management of pituitary and Adrenal tumors, Working Group, Rotterdam, Netherlands, 2015  
Science Days, Working Group, Antwerp, Belgium, 2015  
2. National Congress of Molecular Biology and Biotechnology, Working Group, Antalya, Turkey, 2012  
9. Ankara Biotechnology Days, Microbial Biotechnology, Working Group, Ankara, Turkey, 2011  
1st International Symposium of Secondary Metabolites, Working Group, Denizli, Turkey, 2011  
1.National Congress of Molecular Biology and Biotechnology, Working Group, Antalya, Turkey, 2010