

## Lect. PhD MELİKE SEVER BAHÇEKAPILI

### Personal Information

**Office Phone:** [+90 312 305 2130](tel:+903123052130)

**Fax Phone:** [+90 312 311 3973](tel:+903123113973)

**Email:** melikesever@hacettepe.edu.tr

**Web:** <https://avesis.hacettepe.edu.tr/melikesever>

**Address:** Hacettepe Üniversitesi, Tıp Fakültesi Binası, Asma Kat, Nörolojik Bilimler ve Psikiyatri Enstitüsü, Sıhhiye, Ankara

### International Researcher IDs

ORCID: 0000-0002-0592-9666

ScopusID: 57219345331

Yoksis Researcher ID: 316888

### Education Information

Doctorate, İhsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Materials Science and Nanotechnology, Turkey 2012 - 2017

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biochemistry, Turkey 2011 - 2012

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey 2005 - 2011

### Research Areas

Medicine, Fundamental Medical Sciences, Molecular Biology and Genetics, Neurobiology

### Academic Titles / Tasks

Lecturer PhD, Hacettepe University, Nörolojik Bilimler ve Psikiyatri Enstitüsü, Nörolojik ve Psikolojik Temel Bilimler A.B.D., 2020 - Continues

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

- I. **Vesicular HMGB1 release from neurons stressed with spreading depolarization enables confined inflammatory signaling to astrocytes**  
Kaya Z., Belder N., Sever-Bahçekapılı M., Donmez-Demir B., Erdener Ş. E., Bozbeyoglu N., Bagci C., Eren-Kocak E., Yemisci M., Karatas H., et al.  
Journal of Neuroinflammation, vol.20, no.1, 2023 (SCI-Expanded)
- II. **Reduced folate carrier 1 is present in retinal microvessels and crucial for the inner blood retinal barrier integrity**  
Gurler G., BELDER N., BEKER M. Ç., SEVER BAHÇEKAPILI M., Uruk G., Kilic E., YEMİŞÇİ ÖZKAN M.  
Fluids and Barriers of the CNS, vol.20, no.1, 2023 (SCI-Expanded)
- III. **Supramolecular presentation of bioinstructive peptides on soft multilayered nanobiomaterials stimulates neurite outgrowth**

- Lopes M., Torrado M., Barth D., Santos S. D., Sever-Bahcekapili M., Tekinay A. B., Guler M. O., Cleymand F., Pêgo A. P., Borges J., et al.  
*Biomaterials Science*, vol.11, no.14, pp.5012-5024, 2023 (SCI-Expanded)
- IV. Overview of extracellular vesicle characterization techniques and introduction to combined reflectance and fluorescence confocal microscopy to distinguish extracellular vesicle subpopulations**  
Bağcı C., Sever-Bahcekapili M., Belder N., Bennett A. P. S., Erdener S. E., Dalkara T.  
*Neurophotonics*, vol.9, no.2, 2022 (SCI-Expanded)
- V. Doxycycline alleviates acute traumatic brain injury by suppressing neuroinflammation and apoptosis in a mouse model**  
Marjani S., Zirh S., Sever-Bahcekapili M., Cakir-Aktas C., Muftuoglu S. F., Mut M.  
*JOURNAL OF NEUROIMMUNOLOGY*, vol.359, 2021 (SCI-Expanded)
- VI. Neuroactive Peptide Nanofibers for Regeneration of Spinal Cord after Injury.**  
Sever-Bahcekapili M., Yilmaz C., Demirel A., Kilinc M., Dogan I., Caglar Y., Guler M., Tekinay A.  
*Macromolecular bioscience*, vol.21, 2021 (SCI-Expanded)
- VII. Tenascin-C derived signaling induces neuronal differentiation in a three-dimensional peptide nanofiber gel.**  
Sever M., Gunay G., Guler M., Tekinay A.  
*Biomaterials science*, vol.6, pp.1859-1868, 2018 (SCI-Expanded)
- VIII. Self-assembled peptide nanostructures and their gels for regenerative medicine applications**  
Sever M., Tansik G., Arslan E., Yergoz F., Ozkan A. D., Tekinay A. B., Guler M. O.  
*SELF-ASSEMBLING BIOMATERIALS: MOLECULAR DESIGN, CHARACTERIZATION AND APPLICATION IN BIOLOGY AND MEDICINE*, pp.455-473, 2018 (SCI-Expanded)
- IX. Three-Dimensional Laminin Mimetic Peptide Nanofiber Gels for In Vitro Neural Differentiation**  
Gunay G., Sever M., Tekinay A. B., Guler M. O.  
*BIOTECHNOLOGY JOURNAL*, vol.12, no.12, 2017 (SCI-Expanded)
- X. Regenerative effects of peptide nanofibers in an experimental model of Parkinson's disease.**  
Sever M., Turkyilmaz M., Sevinc C., Cakir A., Ocalan B., Cansev M., Guler M., Tekinay A.  
*Acta biomaterialia*, vol.46, pp.79-90, 2016 (SCI-Expanded)
- XI. Sciatic nerve regeneration induced by glycosaminoglycan and laminin mimetic peptide nanofiber gels**  
Mammadov B., Sever M., Gecer M., Zor F., Ozturk S., Akgun H., Ulas U. H., Orhan Z., Guler M. O., Tekinay A. B.  
*RSC ADVANCES*, vol.6, no.112, pp.110535-110547, 2016 (SCI-Expanded)
- XII. Alteration of enzyme activities and kinetic properties of GST and NQO1 with naturally occurring phenolic compounds**  
Karakurt S., Sever M., Celebioglu H. U., ADALI O.  
*TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI*, vol.40, no.3, pp.251-257, 2015 (SCI-Expanded)
- XIII. Tenascin-C mimetic Peptide nanofibers direct stem cell differentiation to osteogenic lineage.**  
Sever M., Mammadov B., Guler M., Tekinay A.  
*Biomacromolecules*, vol.15, pp.4480-7, 2014 (SCI-Expanded)
- XIV. Neural differentiation on synthetic scaffold materials**  
Mammadov B., Sever M., Guler M. O., Tekinay A. B.  
*BIOMATERIALS SCIENCE*, vol.1, no.11, pp.1119-1137, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- I. Interactions Between Cells and Nanostructured Biomaterials**  
Sever Bahçekapılı M., Tansik G., Guler M. O., Tekinay A. B.  
*Turkiye Klinikleri Medical Oncology-Special Topics*, vol.8, no.2, pp.29-34, 2015 (Peer-Reviewed Journal)

## **Books & Book Chapters**

### **I. Bioactive Nanomaterials for Neural Engineering**

Sever Bahçekapılı M., Uyan İ., Tekinay A. B., Guler M. O.

in: Neural Engineering, Lijie Grace Zhang, David L. Kaplan, Editor, John Wiley & Sons, West Sussex, UK , Basel, pp.181-206, 2016

### **II. Nanomaterials for neural regeneration**

Sever Bahçekapılı M., Mammadov B., Gecer M., Güler M. O., Tekinay A. B.

in: Therapeutic Nanomaterials, Ayse B. Tekinay, Mustafa O. Guler, Editor, John Wiley & Sons, West Sussex, UK , New-Jersey, pp.33-58, 2016

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

### **I. Indirgenmiş folat taşıyıcısı 1 kan-beyin bariyeri bütünlüğünü düzenlemektedir**

Gürler G., Soylu K. O., SEVER BAHÇEKAPILI M., BELDER N., KARATAŞ KURŞUN H., Bolbos R., Wiart M., Chauveau F., YEMİŞÇİ ÖZKAN M.

20. Ulusal Sinirbilim Kongresi, Turkey, 19 October 2022

### **II. MODULATING REDUCED FOLATE CARRIER 1 GENE EXPRESSION CHANGES BLOOD-RETINA BARRIER IN HEALTHY AND ISCHEMIC MICE RETINA**

Gürler G., BELDER N., Beker M., SEVER BAHÇEKAPILI M., Uruk G., KILIÇ E., YEMİŞÇİ ÖZKAN M.

FENS Forum 2022, Paris, France, 09 July 2022

### **III. Reduced Folate Carrier-1 is expressed in cerebral pericytes and might have a role in ischemia**

Gürler G., BELDER N., SEVER BAHÇEKAPILI M., Uruk G., KARATAŞ KURŞUN H., YEMİŞÇİ ÖZKAN M.

BRAIN & BRAIN PET 2022, Glasgow, England, 29 May 2022, pp.105

### **IV. Biofunctionalization of Polymeric Nerve Guidance Conduits with Peptide Nanofibers for Sciatic Nerve Regeneration**

Sever Bahçekapılı M., Mammadov B., Gecer M., Guler M. O., Tekinay A. B.

ASCB Annual Meeting, California, United States Of America, 12 - 16 December 2015, vol.26, pp.5731

### **V. Bone regeneration by bioactive peptide nanofibers**

Tansik G., Sever Bahçekapılı M., Beter M., Guler M. O., Tekinay A. B.

ASCB Annual Meeting, California, United States Of America, 12 - 16 December 2015, vol.26, pp.5201-5202

### **VI. Tenascin-C mimetic peptide nanofibers direct in vitro differentiation of stem cells to osteogenic lineage**

Sever M., Mammadov B., Tekinay A. B., Guler M. O.

FEBS EMBO 2014 Conference, Paris, France, 30 August - 04 September 2014, vol.281, pp.236

### **VII. Modulation of protein and mRNA expressions of rat liver vitamin D<sub>3</sub> metabolizing CYP27B1 by o-coumaric acid**

ADALI O., Sever M., Karakurt S., Sen A.

38th Congress of the Federation-of-European-Biochemical-Societies (FEBS), Saint Peter, Guernsey And Alderney, 6 - 11 July 2013, vol.280, pp.174-175

## **Metrics**

Publication: 24

Citation (WoS): 73

Citation (Scopus): 95

H-Index (WoS): 6

H-Index (Scopus): 5