

Asst. Prof. HANDAN SEVİM AKAN

Personal Information

Office Phone: [+90 312 780 8082](tel:+903127808082)

Fax Phone: [+90 312 299 2028](tel:+903122992028)

Email: sevimh@hacettepe.edu.tr

Web: <https://avesis.hacettepe.edu.tr/sevimh>

Address: Hacettepe Üniversitesi Fen Fakültesi Biyoloji Bölümü 06800 Beytepe/Çankaya/ANKARA

International Researcher IDs

ORCID: 0000-0002-8511-5258

ScopusID: 56764125000

Yoksis Researcher ID: 56515

Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyoloji , Turkey 2009 - 2015

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyoloji , Turkey 2006 - 2009

Undergraduate, Hacettepe University, Fen Fakültesi, Biyoloji, Turkey 2003 - 2006

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Mezenşimal kök hücrelerin immün modülatör etkisinin hemofagositik sendrom klinik uygulamalarına temel oluşturmak üzere in vitro modelde incelenmesi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Genel Biyoloji (Dr), 2015

Postgraduate, Miyokardiyal rejenerasyon için sıçan kemik iliği kök hücrelerinden kardiyomiyositlerin farklılaştırılması ve karakterizasyonu, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Genel Biyoloji (YI) (Tezli), 2009

Research Areas

Life Sciences, Biotechnology, Animal Biology, Animal Physiology, Molecular Biology and Genetics, Genetic Disorders

Academic Titles / Tasks

Assistant Professor, Hacettepe University, Fen Fakültesi, Biyoloji Bölümü, 2019 - Continues

Researcher, Georgetown University, 2020 - 2021

Research Assistant PhD, Hacettepe University, Fen Fakültesi, Biyoloji Bölümü, 2015 - 2019

Research Assistant, Hacettepe University, Fen Fakültesi, Biyoloji Bölümü, 2007 - 2015

Researcher, University of Minnesota, 2013 - 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Insight into the fabrication, characterization, and in vitro cytotoxicity studies approaches of halloysite-based functional anhydride containing polymer nanocomposites**
Aydin K., Sevim Akan H., Kaplan Can H.
INTERNATIONAL JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS, vol.73, no.1, pp.79-90, 2024 (SCI-Expanded)
- II. **Evaluation of glycyl-arginine and lysyl-aspartic acid dipeptides for their antimicrobial, antibiofilm, and anticancer potentials.**
Sevim Akan H., Şahal G., Karaca T. D., Gürpınar Ö. A., Maraş M., Çetin A.
Archives of microbiology, vol.205, no.12, pp.365, 2023 (SCI-Expanded)
- III. **Design, synthesis and biological evaluation of Nucleosidic CD99 inhibitors that selectively reduce Ewing sarcoma viability**
Balaraman K., Deniz E., Nelson E., Pilicer S. L., Atasoy S., Molotkova A., Sevim Akan H., Tiwari P. B., Üren A., Wolf C.
European Journal of Medicinal Chemistry, vol.251, 2023 (SCI-Expanded)
- IV. **Experimental routes of cytotoxicity studies of nanocomposites based on the organo-bentonite clay and anhydride containing co- and terpolymers**
Kaplan Can H., Sevim H., Şahin Ö., Gurpınar O. A.
POLYMER BULLETIN, vol.79, no.7, pp.5549-5567, 2022 (SCI-Expanded)
- V. **Effect of Potassium Aluminum Sulfate Application on the Viability of Fibroblasts on a CAD-CAM Feldspathic Ceramic before and after Thermocycling.**
Cakmak G., Akay C., Donmez M. B., Mumcu E., Akan H., Sasany R., Abou-Ayash S., Yilmaz B.
Materials (Basel, Switzerland), vol.15, no.12, 2022 (SCI-Expanded)
- VI. **Dendritic Cell Differentiation from Human Induced Pluripotent Stem Cells: Challenges and Progress**
Oliveira N. A. J., SEVİM AKAN H.
STEM CELLS AND DEVELOPMENT, vol.31, pp.207-220, 2022 (SCI-Expanded)
- VII. **Clofarabine induces ERK/MSK/CREB activation through inhibiting CD99 on Ewing sarcoma cells**
SEVİM H., Celik H., Dusunceli L., Ceyhan C. S., Molotkova A., Nakazawa K., Graham G. T., Petro J. R., Toretzky J. A., Uren A.
PLOS ONE, vol.16, no.6, 2021 (SCI-Expanded)
- VIII. **Cytotoxicity of long-term denture base materials**
TANIŞ M. Ç., AKAY C., SEVİM H.
INTERNATIONAL JOURNAL OF ARTIFICIAL ORGANS, vol.41, no.10, pp.677-683, 2018 (SCI-Expanded)
- IX. **Bone marrow derived mesenchymal stem cells ameliorate inflammatory response in an in vitro model of familial hemophagocytic lymphohistiocytosis 2**
SEVİM H., KOCAEFE Y. Ç., ONUR M. A., Ucan-Cetinkaya D., GÜRPINAR Ö. A.
STEM CELL RESEARCH & THERAPY, vol.9, 2018 (SCI-Expanded)
- X. **In Vitro Cytotoxicity of Maxillofacial Silicone Elastomers: Effect of Nano-particles**
AKAY C., ÇEVİK P., KARAKIŞ D., SEVİM H.
JOURNAL OF PROSTHODONTICS-IMPLANT ESTHETIC AND RECONSTRUCTIVE DENTISTRY, vol.27, no.6, pp.584-587, 2018 (SCI-Expanded)
- XI. **Effect of artificial saliva with different pH levels on the cytotoxicity of soft denture lining materials**
AKAY C., Tanis M. C., SEVİM H.
INTERNATIONAL JOURNAL OF ARTIFICIAL ORGANS, vol.40, no.10, pp.581-588, 2017 (SCI-Expanded)
- XII. **Cytotoxic Effect of Fungal Sourced Bassiatin on HeLa and L929 Cell Lines**
ÖZGÖR E., SEVİM H., GÜRPINAR Ö. A., KESKİN N.
Journal Of Biotechnology, vol.231, 2016 (SCI-Expanded)
- XIII. **Heparin toxicity in cell culture: a critical link in translation of basic science to clinical practice**
Gurbuz H. A., Durukan A. B., SEVİM H., Ergin E., Gurpınar A., Yorgancıoğlu C.
BLOOD COAGULATION & FIBRINOLYSIS, vol.24, no.7, pp.742-745, 2013 (SCI-Expanded)
- XIV. **TRANSPLANTATION OF MESENCHYMAL STEM CELLS INTO THE ISCHEMIC RAT MYOCARDIUM FOR MYOCARDIAL REGENERATION**

AKBAY E., SEVİM H., DURUKAN A. B., GÜRPINAR Ö. A., GUNAYDIN S., ONUR M. A.

INTERNATIONAL JOURNAL OF CARDIOLOGY, vol.163, 2013 (SCI-Expanded)

XV. **May toxicity of amiodarone be prevented by antioxidants? A cell-culture study**

Durukan A. B., ERDEM B., Durukan E., SEVİM H., Karaduman T., Gurbuz H. A., Gurpinar A., Yorgancioglu C.

JOURNAL OF CARDIOTHORACIC SURGERY, vol.7, 2012 (SCI-Expanded)

XVI. **Induced pluripotent stem cells and their applications | İndüklenmiş pluripotent kök hücreler ve uygulamaları**

SEVİM H., GÜRPINAR Ö. A.

e-Marmara Medical Journal (elektronik), vol.25, no.1, pp.5-9, 2012 (SCI-Expanded)

XVII. **Clinical impact and biomaterial evaluation of autologous platelet gel in cardiac surgery**

Gunaydin S., MCCUSKER K., SARI T., ONUR M. A., Gurpinar A., Sevim H., ATASOY P., YORGANCIOGLU C., ZORLUTUNA Y.

PERFUSION-UK, vol.23, no.3, pp.179-186, 2008 (SCI-Expanded)

Articles Published in Other Journals

I. **Karragenanın malign MCF-7 meme kanseri ve malign olmayan SVCT meme epitel hücre dizileri üzerindeki sitotoksik aktivitesi**

Sayın M., Sevim Akan H., Atalay Ö., Kubat E., Gürpınar Ö. A.

Ege Tıp Bilimleri Dergisi, vol.5, 2022 (Peer-Reviewed Journal)

II. **Cardiomyogenic Gene Expression Profile of 5-Azacytidine-Treated Rat Bone Marrow Mesenchymal Stem Cells**

SEVİM H., AKBAY E., GÜRPINAR Ö. A., Günaydın S., ONUR M. A.

Hacettepe J. Biol. Chem, 2017 (Peer-Reviewed Journal)

III. **Bone Marrow Mesenchymal Stem Cells to Improve Damaged Heart Function after Modified Myocardial Infarction Rat Model**

AKBAY E., SEVİM H., GÜRPINAR Ö. A., ONUR M. A., GÜNAYDIN S.

Hacettepe Journal of Biology and Chemistry, vol.44, no.3, pp.283-292, 2016 (Scopus)

IV. **Induced Pluripotent Stem Cells and Their Applications**

SEVİM H., GÜRPINAR Ö. A.

MARMARA MEDICAL JOURNAL, vol.25, no.1, pp.5-9, 2012 (ESCI)

V. **İndüklenmiş Pluripotent Kök Hücreler ve Uygulamaları**

SEVİM H., GÜRPINAR Ö. A.

Marmara Medica Journal, no.25, pp.5-9, 2012 (Scopus)

VI. **Biocompatibility of a Fifth-Generation Adhesive System on Pulpal and Gingival Fibroblasts**

GÜRPINAR Ö. A., SEVİM H., ONUR M. A., ÇEHRELİ Z. C., Dağlı F.

Hacettepe Journal of Biology and Chemistry, vol.37, no.3, pp.189-195, 2009 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. **HeLa Hücrelerinde Wnt/beta-katenin Sinyal Yolu, Notch Sinyal Yolu ve Apoptozisin İmmünohistokimyasal Olarak Değerlendirilmesi**

DÖNMEZ H. G., SEVİM H.

Ulusal Biyoloji Kongresi, Turkey, 10 - 14 September 2018

II. **Inhibition of cell cycle progression and cell proliferation by repressing activity of important receptors with bassiatin on MCF-7 breast-cancer cells**

Ozgor E., SEVİM H., GÜRPINAR Ö. A., KESKİN N.

European Biotechnology Congress, Athens, Greece, 26 - 28 April 2018, vol.280

III. **Purified melittin from honeybee Apis mellifera venom's effects on U118 glioblastoma cell line**

Guven K. N., SEVİM H., KESKİN N.

European Biotechnology Congress, Athens, Greece, 26 - 28 April 2018, vol.280

- IV. **Perioperative comparison of histidine tryptophan ketoglutarate, del nido, St Thomas and cold blood in high risk Cabg patients**
McCusker K., AKBAY E., SEVİM H., ONUR M. A., Günaydın S.
The American Academy of Cardiovascular Perfusion, 17 - 20 January 2018
- V. **Cytotoxic Effect of Fungal-Sourced Bassiatin on Breast Cancer Cell Lines”, , 25-27 May 2017,**
ÖZGÖR E., SEVİM H., GÜRPINAR Ö. A., KESKİN N.
European Biotechnology Congress (Eurobiotech), Dubrovnik, Croatia, 25 - 27 May 2017
- VI. **Investigation of the effects of Trametes versicolor extracts on L-929 mouse fibroblasts**
ÇELEBİER İ., ULUSOY M., Dede E. C., Ceylan S., İŞÇİ E. T., SEVİM H., GÜRPINAR Ö. A.
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256
- VII. **Cytotoxic effect of fungal-sourced Bassiatin on breast cancer cell lines**
ÖZGÖR E., SEVİM H., GÜRPINAR Ö. A., KESKİN N.
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256
- VIII. **Investigation of the effects of mesenchymal stem cells on the contractile force of the carotid artery in a rat aneurysm model**
Atalay Ö., GÜRPINAR Ö. A., SEVİM H., ONUR M. A.
The 22nd Biomedical Science and Technology Symposium, 12 - 14 May 2017
- IX. **Cytotoxicity of Long-Term Denture Materials**
ÇAKIRBAY TANIŞ M., AKAY C., SEVİM H.
22nd INTERNATIONAL BIOMEDICAL SCIENCE TECHNOLOGY SYMPOSIUM, 12 - 14 May 2017
- X. **Generation of Familial Hemophagocytic Lymphohistiocytosis 2 FHL 2 in vitro model for research**
SEVİM H., GÜRPINAR Ö. A.
INTERNATIONAL CONFERENCE ON BIOLOGICAL SCIENCES (ICBS), Konya, Turkey, 21 - 23 October 2016
- XI. **Cytotoxic effect of fungal-sourced Bassiatin on HeLa and L929 cell lines**
ÖZGÖR E., SEVİM H., GÜRPINAR Ö. A., KESKİN N.
European Biotechnology Conference, Latvia, 5 - 07 May 2016, vol.231
- XII. **Masillofasiyal silikon elastomerlerin in vitro sitotoksitesinin değerlendirilmesi Nano partiküllerin etkisi**
AKAY C., ÇEVİK P., Karakuş D., SEVİM H., MUMCU E.
22. Uluslararası Türk Prostodonti ve İmplantoloji Derneği Bilimsel Kongresi, Turkey, 12 October - 15 November 2015
- XIII. **Mezenşimal kök hücrelerin immün modülatör etkisinin hemofagositik sendrom klinik uygulamalarına temel oluşturmak üzere in vitro modelde incelenmesi**
SEVİM H., GÜRPINAR Ö. A., ONUR M. A., ÇETİNKAYA F. D.
41. Ulusal Hematoloji Kongresi, Turkey, 21 - 24 October 2015
- XIV. **Generation of perforin defected cell line for basic research of familial hemophagocytic lymphohistiocytosis**
SEVİM H., ONUR M. A., GÜRPINAR Ö. A.
2nd International congress on stem cell and cellular therapies, Antalya, Turkey, 15 - 18 October 2015
- XV. **Investigation of the effect of mesenchymal stem cells in carotid artery aneurysm model in rat**
Özbeyen A., SEVİM H., ONUR M. A., GÜRPINAR Ö. A.
2nd International Congress on Stem Cell and Cellular Therapies, Antalya, Turkey, 15 - 18 October 2015
- XVI. **Effects of Rat Mesenchymal Stem Cells Supernatant Derived from Bone Marrow and Adipose Tissue on Peripheral Blood Mononuclear Cell Viability**
SEVİM H., AKBAY E., PERVER D., GÜRPINAR Ö. A., ONUR M. A.
16th Biennial Meeting of the European-Society-for-Immunodeficiencies, Prague, Czech Republic, 29 October - 01 November 2014, vol.34
- XVII. **Differentiation and Characterization of Cardiomyocytes from Rat BM-MSCs For Myocardial Regeneration**

SEVİM H., AKBAY E., GÜRPINAR Ö. A., Gunaydin S., ONUR M. A.

18th Annual Congress of the European-Society-of-Gene-and-Cell-Therapy, Milan, Italy, 22 - 25 October 2010,
vol.21, pp.1482

Supported Projects

SEVİM AKAN H., Uysaler B., DÖNMEZ H. G., KAPLAN CAN H., Project Supported by Higher Education Institutions, Dextran- 9Z 11E Konjuge Linoleik Asit konjugatının hazırlanması ve karakterizasyonu ile farklı kanser hücrelerinde Wntbetakatenin sinyal yolu ve apoptozis üzerine etkisinin incelenmesi, 2018 - 2019

ONUR M. A., GÜRPINAR Ö. A., SEVİM H., Project Supported by Higher Education Institutions, Biyoloji Lisans ve Lisansüstü Eğitim Alt Yapısının Güncellenmesi, 2016 - 2018

GÜRPINAR Ö. A., NİYAZ A., ATALAY Ö., SEVİM H., ONUR M. A., Project Supported by Higher Education Institutions, İnsan Yağ Dokusu Mezenkimal Kök Hücrelerinde Notch Sinyal Yolunun Araştırılması, 2015 - 2016

SEVİM AKAN H., Project Supported by Higher Education Institutions, MEZENŞİMAL KÖK HÜCRELERİN İMMÜN MODÜLATÖR ETKİSİNİN HEMOFAGOSİTİK SENDROM KLİNİK UYGULAMALARINA TEMEL OLUŞTURMAK ÜZERE in vitro MODELDE İNCELENMESİ, 2015 - 2015

GÜRPINAR Ö. A., SEVİM H., Project Supported by Higher Education Institutions, Mezenşimal Kök Hücrelerin Hemofagositik Sendrom Klinik Uygulamalarına Temel Oluşturmak Üzere İmmün Modülatör Etkisinin in vitro Modelde İncelenmesi, 2015 - 2015

Scientific Refereeing

EXPERIMENTAL HEMATOLOGY, SCI Journal, October 2021

JOURNAL OF PEDIATRIC GENETICS, SCI Journal, April 2019

STEM CELL RESEARCH AND THERAPY, SCI Journal, November 2018

TURKISH JOURNAL OF BIOCHEMISTRY, SCI Journal, July 2018

Metrics

Publication: 42

Citation (WoS): 74

Citation (Scopus): 70

H-Index (WoS): 6

H-Index (Scopus): 5

Non Academic Experience

Georgetown University

Minnesota Üniversitesi