

Assistant Professor Dilşad Özerkan

Education:

PhD in Biology (Histology). Ankara University, 2014

M.Sc. in Biology (Histology). Ankara University, 2010

Bachelor's Degree in Biology. Ankara University, 2007

Research Area:

Cell Biology

Histology

Cancer Biology

Anti-cancer

Physiology

Courses:

Physiology I

Physiology II

Histology and Embryology

Publications:

1. Ozerkan D., Ozsoy, N., Cebesoy S. (2014): Response of thymus lymphocytes to streptozotocin-induced diabetes and exogenous vitamin C administration in rats. *Microscopy (Oxf)*. 63 (6): 409-17. (SCI-E).

2. Ozerkan D., Ozsoy, N., Yılmaz, E. (2015): Vitamin D and Melatonin Protect the Cell's Viability and Ameliorate the CCl₄ Induced Cytotoxicity in HepG2 and Hep3B Hepatoma Cell Lines. *Cytotech*. 67:995–1002. (SCI-E).

3. Vural F.D., Cebesoy S., Ozerkan D., Mutlu Eyison H. (2017): The effect of melatonin on rats gastrocnemius muscle applied with carbon tetrachloride (CCl₄). *Journal of Entomology and Zoology Studies*. 5(3): 441-447.

4. **Özerkan, D.**, Özsoy, N., Akbulut, K. G., Güney, S., & Öztürk, G. (2017). The protective effect of vitamin D against carbon tetrachloride damage to the rat liver. *Biotechnic & Histochemistry*, 92(7): 513-523.

5. Erdem Kuruca S., Çetin M. B., Akgün Dar K., **Özerkan D.** (2019). Protective effects of cytokine combinations against the apoptotic activity of glucocorticoids on CD34+ hematopoietic stem/progenitor cells. *Cytotech*. 77(1): 67-77.

6. **Özerkan, D.**, Ertik, O., Kaya, B., Kuruca, S. E., Yanardag, R., & Ülküseven, B. (2019). Novel palladium (II) complexes with tetradentate thiosemicarbazones. Synthesis, characterization, in vitro cytotoxicity and xanthine oxidase inhibition. *Investigational New Drugs*, 37(6), 1187-1197.

7. Erdem Kuruca S., Çelik D.D., Demirel G., **Özerkan D.** (2019). İnsan Periferik Kanından Çok Küçük Embriyonik (Vsel) Kök Hücrelerin Elde Edilmesi Ve Tanımlanması. *J Ist Faculty Med.* (2019). 82(2): 96-106.

8. Erdem Kuruca S., Çelik D.D., **Özerkan D.**, Erdemir G. (2019). Characterization and Isolation Very Small Embryonic-Like (VSEL) Stem Cells Obtained from Various Human Hematopoietic Cell Sources. *cell reviews and reports*, 15(5), 730-742.

9. Erdem Kuruca S., Akgün Dar K, Kapucu A., **Özerkan D.** 1,2 dimetilhidrazin ile oluşturulan kolon kanseri modelinde klinoptilolit destekli beslenmenin kanser gelişimine etkisi. *J Ist Faculty Med.* (2019). 83(1), 36-37.

10. Kalkandelen Cevriye, Sengör Mustafa, Ozen Eroğlu Gunes, **Özerkan Dilsad**, Kuruca Dürdane Serap, Oktar Faik Nüzhet, Gündüz Oguzhan (2019). 3D Printing of Gelatine/Alginate/beta-Tricalcium Phosphate Composite Constructs for Bone Tissue Engineering. *Chemistry Select.* 4(41), 12032-12036.

11. **Özerkan D.**, Ozsoy Erdaş N., Özer Ç. Distribution of spleen connective tissue fibers in diabetic and vitamin C treated diabetic rats. (2020). *Biotechnic & Histochemistry*, 1-7.

Presentations

Assertions presented in international scientific congresses and published in the proceedings

Oral communications

1. Okan D., Ozsoy, N.,Cebesoy, S. "Role of vitamin C on mitotic activity of lymphocytes in thymus of streptozotocin-induced diabetic rats."(2009) (FEBS Kongresi- PRAG).

2. Ozsoy, N., Okan D., Cebesoy, S. "Protective effect of vitamin C treatment on diabetes-induced ultrastructural changes in the thymic capillaries of rats." (2009) (FEBS Kongresi- PRAG)

3. Okan D., Ozsoy, N.,Cebesoy, S.,Ozer, Ç. "Distribution Of Spleen Connective Tissue Fibers In Diabetic And Vitamin C Treated Diabetic Rats" (2011) (Turkish Feps-physiology Meeting).

4. Okan D., Ozsoy, N.,Cebesoy, S., Akbulut, G., Öztürk, G. "Histochemical Properties Of Gastronecmius Muscle Fibers In The Young And Aged Rats"(2011) (Turkish Feps-physiology Meeting).

5. Ozerkan D., Ozsoy, N. "Antifibrotic and Protective Effects of Vitamin D on Experimentally Induced Liver Fibrosis in Rats" (2014) (3rd International Molecular Biology and Biotechnology Congress) (02-06 June 2014) (Bosnia-Herzigova).

6. Şahin I. Ş., Özsoy N., Akbulut G., Öztürk G., Güney Ş., Cebesoy S., Elmubarak S. M.O. E., Özerkan D. "The Effects of Melatonin on Renal Histological Changes with Aging" (2014). (3rd International Molecular Biology and Biotechnology Congress) (02-06 June 2014) (Bosnia-Herzigova).

7. Ozerkan D., Ozsoy N., Akbulut K. G., Güney Ş., Öztürk G. "Histochemical Observations of Protective Effects of Melatonin against Carbon Tetrachloride

(CCl₄) Induced Hepatotoxicity."Joint Meeting of the Federation of European Physiological Societies (FEPS) and the Baltic Physiological Societies. Kaunas, Litvanya. (26 - 29 August, 2015).

(Ozerkan, D., Ozsoy, N., Akbulut, K. G., Guney, S., & Ozturk, G. (2015, November). Histochemical observations on protective effects of melatonin against carbon tetrachloride (CCl₄)-induced hepatotoxicity. In *ACTA PHYSIOLOGICA* (Vol. 215, pp. 131-132). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY-BLACKWELL.)

8. Ozerkan D. "Melatonin's Pro-oxidant Effect is an Advantage or Disadvantage for Normal and Cancer Cells?" 2nd Forensic Toxicology Congress. Ankara, TURKEY. (26-30 May 2016). **Published Abstract**-> ÖZERKAN, D. (2017). MELATONIN'S PRO-OXIDANT EFFECT IS AN ADVANTAGE OR DISADVANTAGE FOR NORMAL AND CANCER CELLS?. *The Turkish Journal Of Occupational / Environmental Medicine and Safety*, Volume 2 (Issue 1 (1)), 224-224. Retrieved from <http://dergipark.gov.tr/turjoem/issue/27700/310665>

9. Vural F.D., Ozerkan D., Cebesoy S., Ozsoy Erdas N., Mutlu Eyison H. Effect Of Carbontetrachloride On Rat Soleus Muscle. II International Congress on Advances in Veterinary Sciences & Technics. Skopje Macedonia (4-8 October 2017).

10. ÖZERKAN, D., ERTİK, O., KAYA, B., YANARDAĞ R., KURUCA, D. S., ÜLKÜSEVEN, B. Cytotoxic Effect of Hydrazinecarbothioamide-based Compounds on Hepatocellular Carcinoma Cells and Activity of Xanthine Oxidase Enzyme Inhibition. INTERNATIONAL CONGRESS ON ENGINEERING AND LIFE SCIENCE. (26-29 April 2018, Kastamonu)

11. EMİN, N., ÖZERKAN, D., NURAL ,K., KURUCA, D. S. Comparative Evaluation of the Effect of *Teucrium Orientale L.* Extract on the Cell Proliferation by Using HCT116 and HUVEC Cells. INTERNATIONAL CONGRESS ON ENGINEERING AND LIFE SCIENCE (26-29 April 2018, Kastamonu)

12. ÖZERKAN, D., EMİN, N., NURAL ,K., KURUCA, D. S. Hepatotoxic Effect of *Teucrium Orientale L.* on Hep3B Cells. II. International Eurasian Agricultural and Natural Sciences Congress (11-15 September 2018, Bakü, Azerbaijan)

13. EMİN, N., ÖZERKAN, D., NURAL ,K. Effect of *Teucrium orientale L.* Extract on the Mesenchymal Stem Cell Proliferation. 2nd INTERNATIONAL CONGRESS ON ENGINEERING AND LIFE SCIENCE (11-14 April 2019, Kastamonu)-- Full text paper

14. Nuray Emin, Dilşad Özerkan. Development of fibroin based composite structures for wound dressing. 3rd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2020) 19-20 March 2020, Ankara, Turkey

Poster communications

1. Okan D., Ozsoy, N., Cebesoy, S., Ozer, Ç. "C Vitamini Uygulanmış Diyabetik Sıçan Timusundaki Mast Hücrelerinin İncelenmesi" (2011) (20.elektron Mikroskobu Kongresi).

2. Cebesoy, S., Ozsoy, N., Okan D. "Diyabetik ve vitamin C tedavili sıçanların timusunda kan-timus bariyerinin ince yapısı" (2011) (20.elektron Mikroskobu Kongresi).

3. Dilşad ÖZERKAN, Fevziye VURAL, Nesrin ÖZSOY, Suna CEBESÖY, Safa Mohammed Elmustafa Osman ELMUBARAK "Deneyisel Karbontetraklorür Toksisitesinde Soleus Kas Hasarı ve D Vitamininin Rolü"(2013) (1.Zooloji Kongresi).

4. Fevziye VURAL, Dilşad ÖZERKAN, Suna CEBESÖY, Nesrin ÖZSOY, Safa Mohammed Elmustafa Osman ELMUBARAK " Karbontetraklorür Uygulanmış Sıçan Soleus Kası Üzerine Melatoninin Etkisi" (2013) (1.Zooloji Kongresi).

5. Ozerkan D., Ozsoy N., Akbulut K. G., Güney Ş., Öztürk G. "Karbontetraklorür (CCl₄) ile Karaciğer Hasarı Oluşturulmuş Sıçanlarda Melatoninin Matriks Metalloproteinaz-9 (MMP-9) Üzerine Etkisinin İmmünohistokimyasal olarak Değerlendirilmesi" (2015) (18. Ulusal Biyoteknoloji Kongresi) 18-19 Aralık 2015, Konya

6. Fevziye VURAL, Suna CEBESOY, **Dilşad ÖZERKAN**. Karbontetraklorür (CCl₄)'ün Gastrocnemius Kasındaki Damarlara Etkisi" (2015) (18. Ulusal Biyoteknoloji Kongresi) 18-19 Aralık 2015, Konya

Scientific Projects:

Project Coordinator in the project titled "Development of Fibroin Based Composite Structures for Skin Tissue Engineering"(2015-2019). Within the scope of the project numbered KU-BAP01 / 2015-23, Kastamonu Univ. Rectorate was supported by Scientific Research Projects (BAP).

Project Coordinator in the project titled "New Generation Nanoparticle Synthesis from Plants with Eco-Friendly Methods and It's Anticancer Effects"(2020-2021). Within the scope of the project numbered 2020/B4, Istinye Univ. Rectorate was supported by Scientific Research Projects (BAP).

Co-investigator in the project titled "Investigation of the Effect of Enzymatic Degradation of Polymeric / Ceramic Structured Composite Biomaterials Used From Bone Marrow Mesenchymal Stem Cells During In vitro Connective Tissue Development on the Phenotypic and Morphological Differentiation of Cells "(2019-2022) Supported by the TUBITAK 1001 Scientific Program.

Co-investigator in the project titled "Identification of breast cancer stem cells using different biochemical and morphological methods"(2020-2022) Istanbul Univ. Rectorate was supported by Scientific Research Projects (BAP).

Co-investigator in the project titled "Assessment of In vitro Effect of Various Mossy Bryophyta Extracts on Colorectal Cancer Cells and Cancer Stem Cells "(2018-2020) TKD-2018-26955 External Partners (KUDOP) project Istanbul Univ. Rectorate was supported by Scientific Research Projects (BAP).

Co-investigator in the project titled "Investigation of the Effects of Melatonin and Vitamin D on Cell Proliferation and Oxidative Stress Against Carbon Tetrachloride (CCl₄) Toxicity In vitro"(2012-2014.) Ankara Univ. Rectorate was supported by Scientific Research Projects (BAP).

Co-investigator in the project titled "Effect of Melatonin and Vitamin D on Oxidative Stress and MMP-9 Against Carbon Tetrachloride (CCl₄) Damage in Rat Liver"(2013-2015).Ankara University Rectorate was supported by Scientific Research Projects (BAP)

Co-investigator in the project titled “Protective Effect of Melatonin and Vitamin D Against Oxidative Damage Caused by Carbon Tetrachloride (CCl₄) in Lung Tissue” (2014-2015). Within the scope of the project numbered 13H4240005, Ankara Univ. Rectorate was supported by Scientific Research Projects (BAP)

Scholarship student in the Project titled “Lung alveolar macrophages and mediating inflammatory processes in the lung in normoxic and hypoxic conditions ”(2009-2012). Supported by the TÜBİTAK Quick Support Program under the project SBAGBMBF-4 / 108S262.

Awards, Grants and Fellowships

1. 2014 pHD Thesis Award with Highest Publication Score (Ankara University Institute of Science)
2. 2015 TÜBİTAK Broadcast Incentive Award
3. 2017 TÜBİTAK Broadcast incentive award
4. 2019 TÜBİTAK Broadcast incentive award