

CURRICULUM VITAE

Name and Surname: Ecem Fatma KARAMAN
Academic Title: Associate Professor
Work Address:
Email: ekaraman@biruni.edu.tr
Certificates Received: Eğiticinin Eğitimi
Area of Expertise: Pharmaceutical Toxicology
Pharmacology and Therapeutics
Professional Sciences

Degree	Department/Program	University	Year
Doctorate	FARMASÖTİK TOKSİKOLOJİ (DR)	İstanbul University	2018
Master's Degree	KOZMETOLOJİ (YL) (TEZLİ)	İstanbul University	2013
Bachelor's Degree	MOLEKÜLER BİYOLOJİ VE GENETİK BÖLÜMÜ	İstanbul University	2010

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):

Enoksolonun deriye uygulanmak üzere farklı taşıyıcılar içinde topikal preparatlarının hazırlanması

Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):

Zearalenon ve metabolitlerinin enerji metabolizmasında rol oynayan genler üzerine etkilerinde epigenetik değişikliklerin in vitro incelenmesi

Position Title	Workplace	Year
Associate Professor	Biruni University	2024-Continues
Assistant Professor	Biruni University	2019-2025

Supervised Doctoral Theses/Proficiency Studies in Arts:

1. Zearalenonun Lipotoksisite Üzerine Etkilerinin İnsan Böbrek Hücrelerinde Araştırılması (2025)

Roles in Projects:

- Polistiren Mikroplastiklerinin İnsan Karaciğer Hücrelerinde Lipotoksisite Üzerine Etkilerinde Epigenetik Mekanizmaların In Vitro İncelenmesi, TUBITAK Project, Karaman E. F. (Executive), 2025-Continues.
- DeneySEL Ülseratif Kolitte Bazı Histon Deasetilaz İnhibitörlerinin Etkileri, TUBITAK Project, Arda P. (Executive), Karaman E. F., Özden S., Özal Coşkun C., 2018-2020.
- Bisfenol A'nın Nöroblastoma ve Prostat Kanseri Hücrelerinde Gen-Spesifik DNA Metilasyonu ve Histon Modifikasyonları Üzerine Etkisi, TUBITAK Project, Özden S. (Executive), Arda P., Sancar S., Karaman E. F., Özal Coşkun C., 2015-2019.

4. *Nöroblastoma ve Prostat Kanseri Hücrelerinde Gen Spesifik DNA Metilasyonu ve Histon Modifikasyonu Üzerine Bisfenol A'nın Etkileri*, TÜBİTAK Project, Sancar S., Arda Pirinççi B. P., Karaman E. F., Özal Coşkun C., Çağlayan M., Özden S. (Executive), 2015-2018.

Administrative Duties:

1. Vice Dean - Biruni University (2023 - Continues)
 2. Head of Main Science/Science Department - Biruni University (2020 - Continues)
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PUBLICATIONS

A. Articles published in international peer-reviewed journals:

- A1.** Karaman E. F., Abudayyak M., Guler Z. R., Ozden S., "Effects of zearalenone on endoplasmic reticulum stress-induced apoptosis via global and gene-specific histone modifications and miRNA-mediated p53-signaling pathway in HEK-293 cells", *Chemico-Biological Interactions*, vol. 418, no. 111585, pp. 1-12, 2025.
- A2.** Civelek E., Karaman E. F., Özden S., Uydeş Doğan B. S., Kaleli Durman D., "Effect of Pioglitazone on Endoplasmic Reticulum Stress and Autophagy Response in the Perivascular Adipose Tissue of Type 2 Diabetic Rats", *PPAR Research*, vol. 2025, no. 1, 2025.
- A3.** Civelek E., Karaman E. F., Özden S., Büyükpınarbaşı N., Sönmez Uydeş Doğan B., Durman D. K., "Evaluation of the effects of pioglitazone on perivascular adipose tissue function, properties, and structure in a rat model of type-2 diabetes", *Canadian Journal of Physiology and Pharmacology*, vol. 103, no. 1, pp. 12-28, 2024.
- A4.** Omerustaoglu Bayoglu Ş., Karaman E. F., Özden S., "Effects of fumonisin B1 on gene-specific DNA methylation related to cancer pathways of p53 signalling and PI3K/Akt signalling in human kidney cells", *WORLD MYCOTOXIN JOURNAL*, vol. 17, pp. 177-189, 2024.
- A5.** Karaman E. F., Abudayyak M., Guler Z. R., Bektas S., Kaptan E., Ozden S., "The effects of fumonisin B1 on intercellular communications and miRNA modulations: Non-genotoxic carcinogenesis mechanisms in human kidney cells", *Toxicology*, vol. 509, 2024.
- A6.** Karaman E. F., Abudayyak M., Ozden S., "The role of chromatin-modifying enzymes and histone modifications in the modulation of p16 gene in fumonisin B1-induced toxicity in human kidney cells", *Mycotoxin Research*, vol. 39, no. 3, pp. 271-283, 2023.
- A7.** Abudayyak M., Karaman E. F., Guler Z. R., Ozden S., "Effects of perfluorooctanoic acid on endoplasmic reticulum stress and lipid metabolism-related genes in human pancreatic cells", *Environmental Toxicology and Pharmacology*, vol. 98, 2023.
- A8.** Abudayyak M., Karaman E. F., Ozden S., "Mechanisms underlying citrinin-induced toxicity via oxidative stress and apoptosis-mediated by mitochondrial-dependent pathway in SH-SY5Y cells", *Drug and Chemical Toxicology*, vol. 46, no. 5, pp. 944-954, 2023.
- A9.** Mehtiyev T., Karaman E. F., Ozden S., "Alterations in cell viability, reactive oxygen species production, and modulation of gene expression involved in mitogen-activated protein kinase/extracellular regulating kinase signaling pathway by glyphosate and its commercial formulation in hepatocellular carcinoma cells", *Toxicology and Industrial Health*, vol. 39, no. 2, pp. 81-93, 2022.
- A10.** Demirel U. U., Ölgen S., Karaman E. F., Tanol M., Özden S., Göker H., "Synthesis of Novel Urea and Sulfonamide Derivatives of Isatin Schiff Bases as Potential Anti-cancer Agents", *Letters in Drug Design and Discovery*, vol. 19, no. 9, pp. 847-857, 2022.
- A11.** Mehtap K., Ezgi Ö., Tugce B., Karaman E. F., Gul O., "Benomyl induced oxidative stress related DNA damage and apoptosis in H9c2 cardiomyoblast cells", *Toxicology in Vitro*, vol. 75, 2021.
- A12.** Öztaş E., Kara M., Boran T., Bişirir E., Karaman E. F., Kaptan E., Özhan G., "Cellular stress pathways are linked to acetamiprid-induced apoptosis in sh-sy5y neural cells", *Biology*, vol. 10, no. 9, 2021.
- A13.** Karaman E. F., Doğan E., Alga D., Özden S., "The effects of prochloraz on the levels of nuclear receptor genes expressions and global DNA methylation in human prostate carcinoma cells", *ISTANBUL JOURNAL OF PHARMACY*, vol. 51, no. 2, pp. 191-197, 2021.
- A14.** Turk-erbul B., Karaman E. F., Duran G. N., Ozbil M., Ozden S., Goktas F., "Synthesis, in vitro cytotoxic and apoptotic effects, and molecular docking study of novel adamantane derivatives", *Archiv der Pharmazie*, vol. 354, no. 5, 2021.
- A15.** Kara M., Öztaş E., Boran T., Karaman E. F., Veskoukis A. S., Tsatsakis A. M., "Ameliorative effects of the sesquiterpenoid valerenic acid on oxidative stress induced in hepg2 cells after exposure to the fungicide benomyl", *Antioxidants*, vol. 10, no. 5, 2021.
- A16.** Karaman E. F., Yiğiter Ş., Özden S., "Investigation the effects of synthetic cannabinoid-akb48 on dna methylation via the regulation of cannabinoid receptor gene specific methylation in vitro", *Journal of Research in Pharmacy*, vol. 25, no. 5, pp. 626-633, 2021.
- A17.** Karaman E. F., Zeybel M., Ozden S., "Evaluation of the epigenetic alterations and gene expression levels of HepG2 cells exposed to zearalenone and α -zearalenol", *Toxicology Letters*, vol. 326, pp. 52-60, 2020.

- A18.** Dacı A., Ozen G., Karaman E. F., Teskin O., Çağlayan M., Celik Z., Ozden S., Dashwood M., Uydes Dogan B. S., Topal G., "In Vitro Effects of Eicosapentaenoic and Docosahexaenoic Acid on the Vascular Tone of a Human Saphenous Vein: Influence of Precontractile Agents", *Annals of Vascular Surgery*, vol. 64, pp. 318-327, 2020.
- A19.** Karaman E. F., Çelik B., Özdemir S., Tekkeli E. K., Demirkoz A. B., Gönüllü Ü., Üner M., "Influence of vehicles and penetration enhancers on anti-inflammatory effect of 18-β glycyrrhetic acid: Kinetic modelling of drug release, in vivo and ex vivo experiments", *Farmacia*, vol. 68, no. 4, pp. 646-655, 2020.
- A20.** Karaman E. F., Ariman I., Ozden S., "Responses of oxidative stress and inflammatory cytokines after zearalenone exposure in human kidney cells", *World Mycotoxin Journal*, vol. 13, no. 3, pp. 411-421, 2020.
- A21.** Arıcan Y. E., Karaman E. F., Özden S., "The subchronic effects of acetamipride on the global DNA methylation levels in Sprague-Dawley rat brain and liver", *ISTANBUL JOURNAL OF PHARMACY*, vol. 49, no. 3, pp. 167-172, 2019.
- A22.** Karaman E. F., Ozden S., "Alterations in global DNA methylation and metabolism-related genes caused by zearalenone in MCF7 and MCF10F cells", *Mycotoxin Research*, vol. 35, no. 3, pp. 309-320, 2019.
- A23.** Çağlayan M., Karaman E. F., Bas S. S., Pirincci P. A., Ozden S., "Effects of BPA on global DNA methylation and global histone 3 lysine modifications in SH-SY5Y cells: An epigenetic mechanism linking the regulation of chromatin modifying genes", *Toxicology in Vitro*, vol. 44, pp. 313-321, 2017.
- A24.** Jannuzzi A. T., Karaman E. F., Oztas E., Yanar H. T., Özhan G., "Telomerase Reverse Transcriptase (TERT) gene variations and susceptibility of colorectal cancer", *Genetic Testing and Molecular Biomarkers*, vol. 19, no. 12, pp. 692-697, 2015.

B. Papers presented at international scientific meetings and published in proceedings:

- B1.** Karaman E. F., Abudayyak M., Güler Z. R., Ozden S., Effects of Zearalenone on the endoplasmic reticulum stress and its relation to the epigenetic mechanisms in HEK-293 cells, In: *58th Congress of the European Societies of Toxicology (EUROTOX 2024)*, Kopenhagen, Denmark, 2024, pp. 225-225.
- B2.** Elagöz G. S., Güler Z. R., Karaman E. F., Özden S., Investigation of the effects of fumonisin B1 on lipotoxicity in human pancreatic cell, In: *57th Congress of the European Societies of Toxicology (EUROTOX 2023)*, Ljubljana, Slovenia, 2023, pp. 226-227.
- B3.** Özcan M., Güler Z. R., Karaman E. F., Özden S., Investigation of the effects of zearalenone on lipotoxicity in human kidney cells, In: *57th Congress of the European Societies of Toxicology (EUROTOX 2023)*, Ljubljana, Slovenia, 2023, pp. 227-227.
- B4.** Abudayyak M., Güler Z. R., Karaman E. F., Özden S., The Role of Epigenetic Mechanisms in the Carcinogenicity of Trichloroethylene: Investigation in Human Kidney Cells in Terms of miRNA Regulation and Histon Modifications, In: *57th Congress of the European Societies of Toxicology (EUROTOX 2023)*, Ljubljana, Slovenia, 2023, pp. 156-157.