

Curriculum Vitae

Name : Güliz
Surname : Armagan
Birthday : 21.02.1980
Nationality : Turkish
Marital Status : Married
Education degree : PhD (Biochemistry)

<i>Name of University:</i>	Ege University
<i>Date:</i>	2002
<i>Degree:</i>	Bachelor's Degree in Pharmacy

Name of University:	Ege University
Date:	2006
Degree:	Master's Degree in Biochemistry (Pharmacy)

Name of University:	Ege University
Date:	2011
Degree:	PhD in Biochemistry (Pharmacy)

Current Situation: Professor (Ege University Faculty of Pharmacy)

Official working duration : 20 years

International researcher IDs

ORCID : 0000-0001-6466-2263

Publons / Web Of Science ResearcherID : ABI-5508-2020

ScopusID : 25935885100

Yöksis Araştırmacı ID : 162990

Academic experience

Prof. Dr., 2022 - , Ege University, Faculty of Pharmacy, Department of Biochemistry, Izmir, Türkiye

Associate Prof., 2017 - 2022, Ege University, Faculty of Pharmacy, Department of Biochemistry, Izmir, Türkiye

Assist. Prof. Dr., 2013 – 2017, Ege University, Faculty of Pharmacy, Department of Biochemistry, Izmir, Türkiye

Research Assistant, 2003 - 2013, Ege University, Faculty of Pharmacy, Department of Biochemistry, Izmir, Türkiye

Administrative experience

Vice Director of Graduate School of Health Sciences, 2022 - , Ege University

Faculty Council Member, 2020 - 2022, Ege University, Faculty of Pharmacy, Türkiye

General Secretary of Turkish Biochemical Society Izmir Branch: 2021- present

Turkish Pharmacopoeia Biochemistry Working Group Member- T.C. Ministry of Health
Turkish Medicines and Medical Devices Agency, 2016-present.

Projects:

Project leader in 10 of 30 completed projects.

Ongoing projects:

Evaluation of the waste byproducts from olive oil production as food supplements and/or therapeutic agents in spinal cord injury models. TÜBİTAK- TAGEM 1005 Project (222O592). 2023- present.

Design and Efficacy Evaluation of Rivastigmine-Loaded Transfersome Formulations with Microfluidic Devices. TÜBİTAK-1002 Project (123S155). 2023-present

Design and In vitro Evaluation of 3D Fiber Formulations Containing N-Acetylcysteine for Spinal Cord Injury. TÜBİTAK- 1002 Project (222S821). 2023-present

Targeting ferroptotic cell death with taurinamidobenzenesulfonamide derivatives in breast cancer. TÜBİTAK-1001 Project (122S667). 2022- present

Investigation of therapeutic targets in neuromelanin-mediated neurodegeneration. Ege Uni. Scientific Research Project. 2021-present.

In vitro and in vivo investigation of the effect of slow-release BMP-2 and alpha (α)-tocopherol surface coating on bone-dental implant contact in titanium implants. TÜBİTAK-1001 Project. 2021- present

Evaluation of the effects of antioxidants and lipid peroxidation inhibitors in an experimental spinal cord injury model. Ege Uni. Scientific Research Project. 2021-present.

Investigation of the Effect of T Lymphocytes Isolated from Multiple Sclerosis Patients on miRNA Profiles in Oligodendrocytes in vitro. Ege Uni. Scientific Research Project (22973). 2022-present.

Articles:

1. Kaftan G, Erdoğan MA, El-Shazly M, Lu MC, Shih SP, Lin HY, Saso L, Armagan G. Heteronemin promotes iron-dependent cell death in pancreatic cancer. *Naunyn Schmiedebergs Arch Pharmacol*. 2023 Sep 29. doi: 10.1007/s00210-023-02736-7.
2. Şeren N, Dovinova I, Birim D, Kaftan G, Barancik M, Erdogan MA, Armagan G. Regulation of tight junction proteins and cell death by peroxisome proliferator-activated receptor γ agonist in brainstem of hypertensive rats. *Naunyn Schmiedebergs Arch Pharmacol*. 2023 Jul 17. doi: 10.1007/s00210-023-02619-x. Epub ahead of print. PMID: 37458776.
3. Saha S, Saso L, Armagan G. Cancer Prevention and Therapy by Targeting Oxidative Stress Pathways, *Molecules*, 28: 4293-4293, 2023.
4. Karadagli SS, Cansever I, Armagan G, Sogut O. Are Some Metals in Tattoo Inks Harmful to Health? An Analytical Approach, *Chemical Research in Toxicology*, 36, 104-111, 2023.
5. Saso L, Reza A, Ng E, Nguyen K, Lin S, Zhang P, Fantozzi PJ, Armagan G, Romeo U, Cirillo N. A comprehensive analysis of the role of oxidative stress in the pathogenesis and chemoprevention of oral submucous fibrosis. *Antioxidants*. 11(5):868, 2022.
6. Erdoğan MA, Bayar C, Ozkaya E, Metin A, Birim D, Armagan G, Elgin Cebe G. Neuroprotective effects of different *Lavandula stoechas* L. extracts against hydrogen peroxide toxicity in vitro. *International Journal of Pharmacology*, 18: 883-896, 2022.
7. Tastan P, Birim D, Fafal T, Armagan G, Kivçak B. Phlomis species protects the cells from oxidative stress by upregulating catalase enzyme expression. *Rivista Italiana delle Sostanze Grasse*, XCIX; 47-54, 2022.

8. Fafal T, Kaftan G, Tastan P, Kıvçak B, Armagan G*. Comparing the fatty acid composition and neuroprotective effects of some Lamiaceae taxa from Turkey. *Chemistry of Natural Compounds*, 58 (2); 208-212, 2022.
9. Zaki M, Loubidi M, Bilgiç T, Birim D, Akssira M, Dacı T, Berteina-Raboin S, Saso L, Khouili M, Armagan G*. Design, synthesis and biological evaluation of novel tomentosin derivatives in NMDA-induced excitotoxicity. *Pharmaceuticals*, 15(4), 421, 2022.
10. Taştan P, Armagan G, Kıvçak B, Dağcı T. Evaluation of cell protection by *Psephellus pyrrohoblepharus* (Boiss.) Wagenitz extracts in MPP⁺-induced dopaminergic cell damage. *Drug and Chemical Toxicology*, 45(1);70-76, 2022.
11. Tber Z, Loubidi M, Jouha J, Hdoufane I, Erdogan MA, Saso L, Armagan G*, Berteina-Raboin S. Pyrindo[2',1':2,3]imidazo[4,5-c]isoquinolin-5-amines as potential cytotoxic agents against human neuroblastoma, *Pharmaceuticals*, 14(8), 750, 2021.
12. Zaiter J, Hibot A, Hafid A, Khouili M, Neves CMB, Simões MMQ, Neves MGPMS, Faustino MAF, Dacı T, Saso L, Armagan G*. Evaluation of the cellular protection by novel spiropyrazole compounds in dopaminergic cell death. *European Journal of Medicinal Chemistry*. 213:113140, 2021.
13. Erdoğan MA, Apaydın M, Armagan G, Taşkırın D. Evaluation of toxicity of gadolinium based contrast agents on neuronal cells, *Acta Radiologica*. 62(2):206-214, 2021.
14. Atalayın Ozkaya C, Tezel H, Armagan G, Tuzcu Gurkan F, Sahbaz U, Dacı T. The effects of extended polymerization time for different resin composites on the reactive oxygen species production and cell viability. *Journal of Oral Science* 63(1):46-49, 2021.
15. Akgül Ö, Erdoğan MA, Birim D, Kayabaşı Ç, Gündüz C, Armagan G. Design, synthesis, cytotoxic activity, and apoptosis inducing effects of 4- and N-substituted benzoyltauramide derivatives. *Turkish Journal of Chemistry*. 44(6):1674-1693, 2020.
16. Aykur M, Armagan G, Vardar R, Dacı H. Fecal calprotectin as a factor that supports the pathogenicity of *Dientamoeba fragilis*. *Microbial Pathogenesis*. 139, 103868, 2020.
17. Armagan G*, Sevgili E, Tuzcu Gürkan F, Aydın Köse F, Bilgiç T, Dacı T, Saso L. Regulation of Nrf2 pathway by glycogen synthase kinase-3 β in MPP⁺-induced cell damage. *Molecules*, 24(7), 1377, 2019. Q2
18. Atalayın Ç, Tezel H, Ergucu Z, Unlu N, Armagan G, Dacı T, Kose T. The improvement of biocompatibility of adhesives: The effects of resveratrol on biocompatibility and dentin micro-tensile bond strengths of self-etch adhesives. *Clinical Oral Investigations*. 23:3213–3218, 2019.
19. Sarıkaya G, Çoban G, Parlar S, Tarıkogulları AH, Armagan G, Erdoğan MA, Alptüzün V, Alpan AS. Multifunctional cholinesterase inhibitors for Alzheimer's disease: Synthesis, biological evaluations, and docking studies of o/p-propoxyphenylsubstituted-1H-benzimidazole derivatives. *Archiv der Pharmazie (Weinheim)*, 2018.
20. Öztürk M, Sözbilen MC, Sevgili E, Dağcı T, Özyalçın H, Armagan G. Epidermal growth factor regulates apoptosis and oxidative stress in a rat model of spinal cord injury, *Injury*, S0020-1383(18)30133-5, 2018.
21. Sözbilen MC, Öztürk M, Kaftan G, Dağcı T, Özyalçın H, Armagan G. Neuroprotective effects of C-terminal domain of tetanus toxin on rat brain against motorneuron damages after experimental spinal cord injury. *Spine (Phila Pa 1976)*. 15;43(6):E327-E333, 2018.
22. Loubidi M, Jouha J, Tber Z, Khouili M, Suzenet F, Akssira M, Erdogan MA, Köse FA, Dacı T, Armagan G, Saso L, Guillaumet G. Efficient synthesis and first regioselective C-6 direct arylation of imidazo[2,1-c][1,2,4]triazine scaffold and their evaluation in H₂O₂-induced oxidative stress. *European Journal of Medicinal Chemistry*. 145:113-123, 2018.
23. Alpan AS, Sarıkaya G, Çoban G, Parlar S, Armagan G, Alptüzün V. Mannich-Benzimidazole Derivatives as antioxidant and anticholinesterase inhibitors: synthesis,

- biological evaluations, and molecular docking study. *Archiv der Pharmazie*. 2017 Jul;350(7), 2017.
24. Jouha J, Loubidi M, Bouali J, Hamri S, Hafid A, Suzenet F, Guillaumet G, Dagcı T, Khouili M, Aydın F, Saso L, Armagan G*. Synthesis of new heterocyclic compounds based on pyrazolopyridine scaffold and evaluation of their neuroprotective potential in MPP+-induced neurodegeneration. *European Journal of Medicinal Chemistry*, 129, 41-52, 2017
 25. Bora ES, Erdogan AM, Armagan G, Sevgili E, Dağcı T. Vinpocetine and vasoactive intestinal peptide attenuate manganese-induced toxicity in NE-4C cells. *Biological Trace Element Research*, 174(2): 410-418, 2016.
 26. Yalçın A, Soddu E, Bayrakdar ET, Uyanıkgil Y, Kanit L, Armagan G, Rassu G, Gavini E, Giunchedi P. Neuroprotective effects of engineered polymeric nasal microspheres containing hydroxypropyl- β -cyclodextrin on β -Amyloid (1-42)-induced toxicity. *Journal of Pharmaceutical Sciences*. 2016 Aug; 105(8): 2372-2380, 2016.
 27. Atalayın Ç, Armagan G, Konyalıoğlu S, Kemaloğlu H, Tezel H, Ergurucu Z, Keser A, Dağcı T, Önal B. The protective effect of resveratrol against dentin bonding agents-induced cytotoxicity. *Dental Materials Journal*, 34(6): 766-773, 2015.
 28. Armagan G*, Keser A, Atalayın Ç, Dağcı T. Tideglusib protects neural stem cells against NMDA receptor overactivation. *Pharmacological Reports* 67(5): 823-831, 2015.
 29. Turunc Bayrakdar E, Armagan G, Uyanıkgil Y, Kanit L, Koylu E, Yalcin A. Ex vivo protective effects of nicotinamide and 3-aminobenzamide on rat synaptosomes treated with A β (1-42). *Cell Biochemistry and Function*. 32(7): 557-564, 2014.
 30. Bayrakdar ET, Bojnik E, Armagan G, Kanit L, Benyhe S, Borsodi A, Yalcin A. Kainic acid-induced seizure activity alters the mRNA expressions and G-protein activations of the opioid/nociceptin system receptors in the rat cortex. *Epilepsy Research*, 105: 13-19, 2013.
 31. Konyalıoğlu S, Armagan G, Yalcin A, Atalayın C, Dagci T. Effects of resveratrol on hydrogen peroxide-induced oxidative stress in embryonic neural stem cells. *Neural Regeneration Research*, 8(6): 485-495, 2013.
 32. Turunc E, Karadeniz H, Armagan G, Erdem A, Yalcin A. Electrochemical determination of glutathione in plasma at carbon nanotubes based screen printed electrodes. *Combinatorial Chemistry & High Throughput Screening*, 16(9): 695-701, 2013.
 33. Prinz M, Parlar S, Bayraktar G, Alptuzun V, Erciyas E, Fallarero A, Karlsson D, Vuorela P, Burek M, Forster C, Turunc E, Armagan G, Yalcin A, Schiller C, Leuner K, Krug M, Sotriffer CA, Holzgrabe U. 1,4-Substituted 4-(1H)-pyridylene-hydrazone-type inhibitors of AChE, BuChE, and amyloid- β aggregation crossing the blood-brain barrier. *European Journal of Pharmaceutical Sciences*, 49(4): 603-613, 2013.
 34. Cuellar-Herrera M, Velasco AL, Velasco F, Chavez L, Orozco-Suarez S, Armagan G, Turunc E, Bojnik E, Yalcin A, Benyhe S, Borsodi A, Alonso-Vanegas M, Rocha L. Mu opioid receptor mRNA expression, binding, and functional coupling to G-proteins in human epileptic hippocampus. *Hippocampus*, 22:122-127, 2012.
 35. Bojnik E, Turunc E, Armagan G, Kanit L, Benyhe S, Yalcin A, Borsodi A. Changes in the cannabinoid (CB1) receptor expression level and G-protein activation in kainic acid induced seizures. *Epilepsy Research*, 99: 64-68, 2012.
 36. Armagan G, Bojnik E, Turunc E, Kanit L, Gunduz-Cinar O, Benyhe S, Borsodi A, Yalcin A. Kainic acid-induced changes in the opioid/nociceptin system and the stress/toxicity pathways in the rat hippocampus. *Neurochemistry International*, 60: 555-564, 2012.
 37. Armagan G, Turunc E, Kanit L, Yalcin A. Neuroprotection by mefenamic acid against D-serine: involvement of oxidative stress, inflammation and apoptosis. *Free Radical Research*, 46(6): 726-739, 2012.

38. Armagan G, Kanit L, Yalcin A. Effects of non-steroidal antiinflammatory drugs on D-serine-induced oxidative stress in vitro. *Drug and Chemical Toxicology*, 35(4): 393-398, 2012.
39. Armagan G, Kanit L, Yalcin A. D-serine treatment induces oxidative stress in rat brain. *Drug and Chemical Toxicology* 34(2): 129-138, 2011.
40. Yalcin A, Armagan G, Turunc E, Konyalioglu S, Kanit L. Potential neuroprotective effect of γ - glutamylcysteine ethyl ester on rat brain against kainic acid-induced excitotoxicity. *Free Radical Research* 44(5): 513-521, 2010.
41. Armagan G, Kanit L, Terek CM, Sozmen EY, Yalcin A. The levels of glutathione and nitrite-nitrate and the expression of bcl-2 mRNA in ovariectomized rats treated by raloxifene against kainic acid. *International Journal of Neuroscience* 119(2): 227-239, 2009.
42. Dagci T, Armagan G, Konyalioglu S, Yalcin A. Alterations in the expression of the apurinic/aprimidinic endonuclease-1/redox factor-1 (APE/Ref-1) and DNA damage in the caudal region of acute and chronic spinal cord injured rats treated by embryonic neural stem cells. *Physiological Research* 58(3):427-434, 2009.
43. Karadeniz H, Armagan G, Erdem A, Turunc E, Caliskan A, Kanit L, Yalcin A. The comparison of electrochemical assay and agarose gel electrophoresis for the determination of DNA damage induced by kainic acid. *Electroanalysis* 21(22): 2468-2476, 2009.
44. Konyalioglu S, Durmaz G, Yalcin A. The potential antioxidant effect of raloxifene treatment: a study on heart, liver and brain cortex of ovariectomized female rats. *Cell Biochemistry and Function* 25(3): 259-266, 2007.
45. Ozyazici M, Gokce EH, Ozer O, Ay Z, Guneri T, Ertan G, Gokce G, Metin DY, Hilmioglu S, Durmaz G, Yalcin A, Pekcetin C, Ozyurt D. In vitro release-in vivo microbiological and toxicological studies on ketoconazole lipid granules. *Pharmaceutical Development and Technology* 12(6): 581-590, 2007.
46. Yalcin A, Kanit L, Durmaz G, Sargin S, Terek CH, Tanyolac B. Altered level of apurinic/aprimidinic endonuclease/redox factor-1 (APE/REF-1) mRNA in the hippocampus of ovariectomized rats treated by raloxifene against kainic acid. *Clinical and Experimental Pharmacology and Physiology* 32 (8): 611-614, 2005.
47. Armagan G, Sevgili E, Turunc E, Kanit L, Yalcin A. Effect of mefenamic acid on base excision repair enzymes against D-serine-induced neurotoxicity. *Turkish Journal of Pharmaceutical Sciences*, 13(1): 103-114, 2016.
48. Kaftan G, Dağcı T, Armagan G. The comparison of apoptosis-related protein expressions in neurotoxin-based in vitro Parkinson's Disease models. *Journal of Research in Pharmacy*, 24(1): 112-120, 2020.
49. Taştan P, Armagan G, Dağcı T, Kıvçak B. Psephellus pyrrhoblepharus ekstralarının sitotoksik aktivitesi, *Kahramanmaraş Sütçü İmam Tıp Fakültesi Dergisi*, 16(2): 231-235, 2021.
50. Pelin Taştan, Derviş Birim, Tuğçe Fafal, Güliz Armagan, Bijen Kıvçak. Bazı Lamiaceae Bitkilerinin Yağ Asidi Bileşiminin Belirlenmesi. Yıl 2022, Cilt 25, Sayı 6, 1199 - 1204, 30.12.2022. <https://doi.org/10.18016/ksutarimdog.vi.984818>

Book chapter

Armagan G. Önemli biyomarkırlar ve yeni hedefler. Kerry Z, Yağdı T, editörler. Kalp Yetersizliği ve Tedavisinde Yeni Hedefler. 1. Baskı. Ankara: Türkiye Klinikleri; 2023. p.8-11.

İlaç hedefi olarak nükleik asitler, An Introduction to Medicinal Chemistry, Sixth Edition, Chapter Vocational Book, Nobel Tıp Kitapevi, Nationally 7 / 8 Recognized, 2021, pp 128-144, Turkey, Ankara

Türk Farmakopesi 2017, Türk Farmakopesi 2017, Chapter Vocational Book, Sağlık Bakanlığı, Nationally Recognized, 2018, pp 1-666, Turkey, Ankara

Majistral Ürünler, Türk Farmakopesi 2017, Chapter Vocational Book, T.C. Sağlık Bakanlığı Türkiye İlaç ve Tıbbi Cihaz Kurumu Artı 6 Reklam Matbaa Ltd. Şti., 2018, Turkey

Awards

Best Oral Presentation Award to Nazlıcan Şeren, İma Dovinova, Miroslav Barancik, Güliz Armagan. PPAR γ aktivasyonunun hipertansif sıçanların beyinsapında çeşitli yollara etkisi. VII. Türkiye *in vitro* Diyagnostik Sempozyumu, 27-29 April 2022.

Best African Scientific Paper Award (3rd), 2018, paper proposing to synthesize potential neuroprotective heterocyclic compounds based on pyrazolopyridine derivatives in order to evaluate their therapeutic effects on neurodegeneration, Award from Scientific / Professional Studies, Science Award by Overseas, Institutions and Organizations, L'Association Marocaine Pour Le Développement De La Recherche Scientifique (Amdrs)

Best Poster Presentation Award 2018, Award from Scientific / Professional Studies, Award given by Congress, Conference, Festival or Symposium Boards, Restoratif Dış Hekimleri Derneği 22. Uluslararası Bilimsel Kongresi

Best Oral Presentation Award, 2017, Award from Scientific / Professional Studies, Award given by Congress, Conference, Festival or Symposium Boards, Restoratif Dışhekimliği Derneği

Best Oral Presentation Award, 2017, Award from Scientific / Professional Studies, Science Award Given by Domestic Institutions and Organizations, Restoratif Dışhekimliği Derneği

Young Investigator Award, 2012, Award from Scientific / Professional Studies, Award given by Congress, Conference, Festival or Symposium Boards, Oxygen Club of California

1. Ege AR-GE ve Teknoloji Günleri Yaşam Bilimleri alanında proje yarışmasında 3.lük ödülü, 2010, Award from Project Competition, First awards in Continuously Organized Contest, Ege Üniversitesi

Trainings:

Lecturer and researcher with nearly 20 years of experience teaching courses in both undergraduate and graduate levels. Supervised 2 MA, 1 PhD thesis and supervising ongoing 2 PhD dissertations.

Undergraduate level courses covering Biology and Biochemistry (Biochemistry I, II and III, Biology II).

Graduate level courses (Master and PhD programs in Biochemistry): Signal Transduction, Advanced Biochemistry, Advanced Biochemical Techniques, Critical Thinking in Research.