CURRICULUM VITAE AND PUBLICATIONS LIST

CURRICULUM VITAE

Name and Surname:	Furkan AYAZ
Date of Birth:	1988
Academic Title:	Professor Dr.
Work Address:	
Email:	fayaz@biruni.edu.tr
Foreign Languages Known (Score and Year):	English, C2 Proficiency, 2021
Area of Expertise:	Biotechnology Molecular Biology and Genetics Temel Bilimler > Yaşam Bilimleri > İmmünoloji

Degree	Department/Program	University	Year
Doctorate			2015
Bachelor's Degree	İKTİSAT BÖLÜMÜ	Anadolu University	2016
Bachelor's Degree	KİMYA BÖLÜMÜ	Boğaziçi University	2010
Bachelor's Degree	MOLEKÜLER BİYOLOJİ VE GENETİK BÖLÜMÜ	Boğaziçi University	2010

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

The role of Notch3 in T helper cell differentiation and induction of EAE

Position Title	Workplace	Year
Professor Dr.	Biruni University	2023-Continues
Associate Professor	Mersin University	2019-2023
Assistant Professor	Mersin University	2017-2019

Supervised Master's Theses:

1. INVESTIGATION OF IMMUNOMODULATORY EFFECTS OF MAXIMIN S1 ON MACROPHAGES (2025)
2. Damar endotel hücrelerinin büyümesi, çoğalması ve canlılığını koruyabilmesi için gerekli faktörlerin belirlenmesi ve bu faktörlerin fonksiyonlarının damar oluşumu üzerinden incelenmesi (2023)
3. OZF2 fenotiyazin türevinin anti-kanser ve anti-inflamatuar aktivitelerinin incelenmesi (2023)
4. RHE 231 VE RHE 238 MOLEKÜLLERİNİN ANTİ-İNFLAMMATUVAR ETKİLERİ (2019)
5. RHE 241 ve RHE 248 Moleküllerinin Anti-inflamatuvar ve Anti-kanser Etkileri (2019)

Supervised Doctoral Theses/Proficiency Studies in Arts:

1. Prostat, Kolon ve Deri Kanseri Hücrelerinde Çoklu İlaç Kombinasyonlarının Anti-Kanser Etkilerinin İncelenmesi (2020)

Roles in Projects:

Kırım-Kongo Kanamalı Ateşi Hastalığı Patogenezinde CircRNA Ekspresyon Profillerinin Araştırılması (2023 - Continues)
Kendi kendini yenileyebilen, gelişmiş özelliklerde yerli mikro-nano hibrit diş dolgusu kompozitlerinin geliştirilmesi ve in-vitro performanslarının belirlenmesi (2023 - Continues)
Aşılarda Kullanılmak Üzere Kuantum Nokta İçeren Steril Enjeksiyonluk İlaç Formülasyonlarının Hazırlanması (2022 - 2024)
Meme Kanseri Hücre Hatlarına Karşı Olası Bir Tedavide Yan Etkileri Minimalize Etme Potansiyeli Olan Yeni Nesil Fotodinamik Terapi Ajanlarının Test Edilmesi (2023 - 2024)
Sertralin Antidepresanının Memeli Makrofaj Hücrelerindeki İmmünostimilatör Özelliğinin ve P38, P13K Yolaklarındaki İmmunomodulatör Etki Mekanızmasının Araştırılması (2022 - 2023)
Pestisitlerin bağışıklık sisteminin iltihaplı tepkilerini düzenlemesinin moleküler seviyede incelenmesi (2022 - 2023)
Meme ve Over Kanseri Hücrelerine Karşı Nanopartiküllerin in Vitro Olarak Antikanser Etkinliklerinin İncelenmesi (2021 - Continues)
Yeni Ftalosiyanin Türevlerinin Sentezi ve Anti-Kanser, Anti-anjiyojenik, Anti-metastatik ve İmmünomodülatör Uygulamaları (2019 - 2022)
DOKU VE HÜCRE KÜLTÜRÜ ÇALIŞMALARINDA KULLANILMAK ÜZERE YENİ İNSAN FİBROBLAST HÜCRE HATLARININ OLUŞTURULMASI VE TİCARİ FİBROBLAST HÜCRE HATLARI İLE KARŞILAŞTIRILMASI (2018 - 2021)
Kişiselleştirilmiş Kanser İmmünoterapi Tedavi Yönteminde Farklı Bağışıklık Sistemi Hücre Türleri ve Alt Tiplerinin Etkinliklerinin İn Vitro ve Ex Vivo Yöntemlerle Belirlenmesi (2021 - 2021)
Mersin Üniversitesi Fen Edebiyat Fakültesi Biyoteknoloji Bölümü Eğitim ve Araştırma Altyapı Geliştirme Projesi (2019 - 2021)
İmmünoterapi Uygulamaları için Araştırma ve Geliştirme Olanaklarının Artırılması (2020 - 2021)
Moleküler Biyoloji ve Hücre Biyolojisi Çalışmalarında Kullanılabilecek Sitotoksik Etkisi Minimal Plasmid Transfeksiyon Maddesi Üretimi ve Kullanımda Olan Ticari Müadilleri ile Karşılaştırılması (2018 - 2020)
Çeşitli karbon nanopartiküllerin ve doğadan izole edilmiş bakteriyofaj türlerinin immünomodülatör ve anti kanser etkileri (2017 - 2019)

PUBLICATIONS

A. Articles published in international peer-reviewed journals:

A1. "Immunomodulatory effects of medicinal leech saliva extract on in vitro activated macrophages", Immunologic Research, 2025.

A2. "Immunomodulatory effects of alexidine dihydrochloride on mammalian macrophages through the modulation of the JNK pathway", Immunologic Research, 2025.

A3. "Adjuvant Potential of Diadema Setosum Spine’s Toxin On Macrophages", Thalassas, 2025.

A4. "Exploring the immunomodulatory effects of sertraline: Cytokine modulation and signaling pathway dynamics", Journal of Neuroimmunology, 2025.

A5. "Synthetic biology and application areas", Discover Biotechnology, 2025.

A6. "Anti-cancer and immunomodulatory photodynamic therapy application of novel porphyrin derivatives", Journal of Drug Delivery Science and Technology, 2025.

A7. "Improved Malignancy of Colon Cancer Cells at Gene Expression Level With Constitutive Activation of the Eukaryotic Elongation Factor 2 Under Nutrition-Deficient Conditions", Chemistry and Biodiversity, 2025.

A8. "Electrospun nanofiber mats caged the mammalian macrophages on their surfaces and prevented their inflammatory responses independent of the fiber diameter", Scientific Reports, 2024.

A9. "Adjuvant Potential of Lionfish Venom on LPS Activated Mammalian Macrophages", International Journal of Peptide Research and Therapeutics, 2024.

A10. "Anti-inflammatory activity of benidipine hydrochloride in LPS-activated mammalian macrophages", Naunyn-Schmiedeberg's Archives of Pharmacology, 2024.

A11. "The Effect of a Casein and Gluten-Free Diet on the Epigenetic Characteristics of FoxP3 in Patients With Hashimoto's Thyroiditis", Cureus, 2024.

A12. "Effects of graphene ZNO on macrophages adjuvant effect of reduced graphene layers modified with different concentrations of ZnO on mammalian macrophages", Journal of Drug Delivery Science and Technology, 2024.

A13. "Anti-Inflamatory Activities of Novel Chalcone Derivatives", Russian Journal of Bioorganic Chemistry, 2024.

A14. "Photodynamic anti-inflammatory activity of meso-aryl substituted porphyrin derivative on mammalian macrophages", Photodiagnosis and Photodynamic Therapy, 2024.

A15. "Anti-bacterial, anti-fungal, and anti-inflammatory activities of wood vinegar: a potential remedy for major plant diseases and inflammatory reactions", Biomass Conversion and Biorefinery, 2024.

A16. "A Novel Phenothiazine Derivative's Anti-Proliferative Action on the Colon Cancer Cell Line and Its Immunomodulatory Activity on LPS Activated Mammalian Macrophages", Journal of Biological Regulators and Homeostatic Agents, 2024.

A17. "Editorial: Developing biocompatible and biotechnological tools against cancer and autoimmune disorders", Frontiers in Immunology, 2024.

A18. "Synthesis, anti-inflammatory activity, inverse molecular docking, and acid dissociation constants of new naphthoquinone-thiazole hybrids", Bioorganic and Medicinal Chemistry, 2023.

A19. "Paroxetine's effect on the proinflammatory cytokine stimulation and intracellular signaling pathways in J774.2 cells", Naunyn-Schmiedeberg's Archives of Pharmacology, 2023.

A20. "Anti-inflammatory activity of bupropion through immunomodulation of the macrophages", Naunyn-Schmiedeberg's Archives of Pharmacology, 2023.

A21. "Role of lncRNAs in Remodeling of the Coronary Artery Plaques in Patients with Atherosclerosis", Molecular Diagnosis and Therapy, 2023.

A22. "Escitalopram's inflammatory effect on the mammalian macrophages and its intracellular mechanism of action", Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2023.

A23. "Photodynamic Anti-Inflammatory Activity of Porphyrin Derivative on In-Vitro Activated Macrophages", Pharmaceutical Chemistry Journal, 2023.

A24. "Immunostimulatory activity of fluoxetine in macrophages via regulation of the PI3K and P38 signaling pathways", Immunologic Research, 2023.

A25. "Anti-inflammatory Potential of 1,4-Naphthoquinone Acyl Thiourea Hybrids on Lipopolysaccharide-Activated Mammalian Macrophages, and Their Acid Dissociation Constants", ChemistrySelect, 2023.

A26. "Apis mellifera anatoliaca Venom Exerted Anti-Inflammatory Activity on LPS-Stimulated Mammalian Macrophages by Reducing the Production of the Inflammatory Cytokines", Applied Biochemistry and Biotechnology, 2023.

A27. "Immunomodulatory activities of novel carbon quantum dots on in vitro activated mammalian macrophages", Journal of Materials Research, 2023.

A28. "Determination of genomic regions related citrus chlorotic dwarf disease in clementine mandarin × Minneola tangelo hybrid population by QTL analysis", Euphytica, 2023.

A29. "Conditioned media of mouse macrophages modulates neuronal dynamics in mouse hippocampal cells", International Immunopharmacology, 2023.

A30. "Beyond the Conventional Photodynamic Therapy by Water-Soluble Phthalocyanines", ChemistrySelect, 2022.

A31. "Novel urea-thiourea hybrids bearing 1,4-naphthoquinone moiety: Anti-inflammatory activity on mammalian macrophages by regulating intracellular PI3K pathway, and molecular docking study", Journal of Molecular Structure, 2022.

A32. "Photodynamic anti-inflammatory activity of azulene derivatives on mammalian macrophages and their intracellular mechanism of action", Photodiagnosis and Photodynamic Therapy, 2022.

A33. "Non-canonical anti-cancer, anti-metastatic, anti-angiogenic and immunomodulatory PDT potentials of water soluble phthalocyanine derivatives with imidazole groups and their intracellular mechanism of action", Photodiagnosis and Photodynamic Therapy, 2022.

A34. "Water-Based Synthesis of Copper Chalcogenide Structures and Their Photodynamic Immunomodulatory Activities on Mammalian Macrophages", Applied Biochemistry and Biotechnology, 2022.

A35. "Synthesis of novel immunomodulatory 1,4-disubstituted bis-1,2,3-triazoles by using click chemistry and their intracellular mechanism of action", Bioorganic and Medicinal Chemistry Letters, 2022.

A36. "Novel benzoylthiourea derivatives had differential anti-inflammatory photodynamic therapy potentials on in vitro stimulated mammalian macrophages", Photodiagnosis and Photodynamic Therapy, 2022.

A37. "A Review on the Design, Synthesis, and Structure-activity Relationships of Benzothiazole Derivatives against Hypoxic Tumors", Current organic synthesis, 2022.

A38. "Injectable chitosan cryogel microspheres with biocompatible properties on mammalian macrophages in vitro", Journal of Materials Science, 2021.

A39. "Antiproliferative activity of Tamoxifen, Vitamin D3 and their concomitant treatment.", EXCLI Journal, 2021.

A40. "Biochar as a Biocompatible Mild Anti-Inflammatory Supplement for Animal Feed and Agricultural Fields", Chemistry and Biodiversity, 2021.

A41. "Differential anti-inflammatory properties of chitosan-based cryogel scaffolds depending on chitosan/gelatin ratio", Artificial Cells, Nanomedicine and Biotechnology, 2021.

A42. "Antiinflammatory photodynamic therapy potential of polyoxyethylene-substituted perylene diimide, nitrocatechol, and azo dye", Turkish Journal of Chemistry, 2021.

A43. "Immunoactive photosensitizers had photodynamic immunostimulatory and immunomodulatory effects on mammalian macrophages", Photodiagnosis and Photodynamic Therapy, 2020.

A44. "Investigating the Immunostimulatory and Immunomodulatory Effects of cis and trans Isomers of Ruthenium Polypyridyl Complexes on the Mammalian Macrophage-Like Cells", ChemistrySelect, 2020.

A45. "Response to the Letter to the editor concerning “A novel whole blood based method for lymphocyte transformation test in drug allergies”", Journal of Immunological Methods, 2020.

A46. "Novel Copper Bearing Schiff Bases with Photodynamic Anti-Inflammatory and Anti-Microbial Activities", Applied Biochemistry and Biotechnology, 2020.

A47. "Anti-Cancer and Anti-Inflammatory Activities of Bromo- and Cyano-Substituted Azulene Derivatives", Inflammation, 2020.

A48. "Ruthenium Bipyridyl Dithiocyanate Complex Exerted Adjuvant Activity on the Activated Mammalian Macrophages in vitro", Inflammation, 2020.

A49. "Photo induced anti-inflammatory activities of a Thiophene substituted subphthalocyanine derivative", Photodiagnosis and Photodynamic Therapy, 2020.

A50. "Differential effects of aminochlorin derivatives on the phagocytic and inflammatory potentials of mammalian macrophages", European Journal of Pharmacology, 2020.

A51. "Immunostimulatory Activities of Coliphages on In Vitro Activated Mammalian Macrophages", Inflammation, 2020.

A52. "Differential Immunomodulatory Effect of Carbon Dots Influenced by the Type of Surface Passivation Agent", Inflammation, 2020.

A53. "Correction to: Differential Immunomodulatory Effect of Carbon Dots Influenced by the Type of Surface Passivation Agent (Inflammation, (2020), 43, 2, (777-783), 10.1007/s10753-019-01165-0)", Inflammation, 2020.

A54. "A novel whole blood based method for lymphocyte transformation test in drug allergies", Journal of Immunological Methods, 2020.

A55. "New-Generation Benzimidazole-Based Plasmid Delivery Reagents with High Transfection Efficiencies on the Mammalian Cells", In Vitro Cellular and Developmental Biology - Animal, 2020.

A56. "Unique photodynamic antimicrobial Schiff bases and their copper complexes exert immunomodulatory activity on mammalian macrophages", Journal of Coordination Chemistry, 2020.

A57. "Immunomodulatory activities of zinc(II)phthalocyanine on the mammalian macrophages through p38 pathway: Potential ex vivo immunomodulatory PDT reagents", Bioorganic Chemistry, 2019.

A58. "Differential Immunomodulatory Activities of Schiff Base Complexes Depending on their Metal Conjugation", Inflammation, 2019.

A59. "Heteroleptic Ruthenium Polypyridyl Complex Had Differential Effects on the Production of Pro-inflammatory Cytokines TNFα, IL1β, and IL6 by the Mammalian Macrophages In Vitro", Inflammation, 2019.

A60. "Synthesis of New Alicyclic Oxalamide Derivatives and Their Differential Immunomodulatory Activities on the Mammalian Cells", Journal of Heterocyclic Chemistry, 2019.

A61. "Symmetric bis-benzoxazole-based chemicals exerted anti-inflammatory effect on danger signal LPS-stimulated macrophages", Monatshefte fur Chemie, 2019.

A62. ""Immunomodulatory and immunostimulatory effects of some bisbenzoxazole derivatives on lipopolysaccharide stimulated mammalian macrophage.", JOURNAL OF RESEARCH IN PHARMACY, 2019.

A63. "Aluminum doped carbon nanodots as potent adjuvants on the mammalian macrophages", Molecular Biology Reports, 2019.

A64. "Photo-induced anti-inflammatory activities of chloro substituted subphthalocyanines on the mammalian macrophage in vitro", Photodiagnosis and Photodynamic Therapy, 2019.

A65. "Bisbenzoxazole derivatives had an antiinflammatory effect on in vitro stimulated macrophages", Turkish Journal of Chemistry, 2019.

A66. "Investigation of genotoxic and apoptotic effects of zirconium oxide nanoparticles (20 nm) on L929 mouse fibroblast cell line", Chemico-Biological Interactions, 2018.

A67. "Immunostimulatory effect of Zinc Phthalocyanine derivatives on macrophages based on the pro-inflammatory TNFα and IL1β cytokine production levels", Toxicology in Vitro, 2018.

A68. "Ruthenium pyridyl thiocyanate complex increased the production of pro-inflammatory TNFα and IL1β cytokines by the LPS stimulated mammalian macrophages in vitro", Molecular Biology Reports, 2018.

A69. "First report of Nitzschia navis-varingica in the Mediterranean Sea and growth stimulatory effects of Nitzschia navis-varingica, Chrysochromulina alifera and Heterocapsa pygmaea on different mammalian cell types", Molecular Biology Reports, 2018.

A70. "Immunomodulatory Effects of Coated Gold Nanoparticles in LPS-Stimulated In Vitro and In Vivo Murine Model Systems", Chem, 2016.

A71. "Ikaros mediates the DNA methylation-independent silencing of MCJ/DNAJC15 gene expression in macrophages", Scientific Reports, 2015.

A72. "Regulation of oxidative stress by methylation-controlled j protein controls macrophage responses to inflammatory insults", Journal of Infectious Diseases, 2015.

A73. "Non-canonical Notch signaling in cancer and immunity", Frontiers in Oncology, 2014.

A74. "Synthetic mimics of antimicrobial peptides with immunomodulatory responses", Journal of the American Chemical Society, 2012.

C. National/international books written or chapters in books:

C1. National/international books written:

C1.1. "9th INTERNATIONAL CONGRESS ON APPLIED BIOLOGICAL SCIENCES PROCEEDINGS BOOK", Anatolia Science Academy, 2024.

C1.2. "Biyoteknolojide Kullanılan Teknikler Ve Protokoller", Atlas Akademi Yayın, 2022.

C1.3. "The Proceedings of the 4rd Advanced Engineering Days", Mersin Üniversitesi, 2022.

C1.4. "10. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi Özet Kitabı", ANT Akademi, 2022.

C1.5. "The Proceedings of the 3rd Advanced Engineering Days", Mersin Üniversitesi, 2022.

C2. Chapters in national/international books written:

C2.1. "Hücre Biyolojisi", Nobel Yayınevi, 2022.

D. Articles published in national peer-reviewed journals:

D1. "Inaugural Editorial of Discover Immunity.", Discover Immunity, 2024.

D2. "Inflammatory and Erectile Dysfunction (Impotence) Treating Potential of Lionfish Venom.", Mediterranean Fisheries and Aquaculture Research, 2020.

D3. "Anti-inflammatory properties of the Ruthenium polypyridil complex, K314, on the in vitro activated macrophages.", Journal of research in pharmacy, 2019.

D4. "Immunostimulatory and Immunomodulatory Effects of Nitzschia navis-varingica, Heterocapsa pygmaea and Chrysochromulina alifera Whole Cell Extracts on Mammalian Macrophage Cells.", Natural and Engineering Sciences, 2019.

D5. "BISBENZOXAZOLE DERIVATIVES HAD ANTI-PROLIFERATIVE EFFECT ON HUMAN CANCER CELLS.", Eskişehir Teknik Üniversitesi Bilim ve Teknoloji Dergisi - C Yaşam Bilimleri Ve Biyoteknoloji, 2019.

D6. "From peripherally unsubstituted subphthalocyanines with anti-inflammatory activity on macrophages to tri-iodo derivatives with adjuvant and immunostimulatory functions.", Journal of Porphyrins and Phthalocyanines, 2019.

D7. "Ruthenium Based Photosensitizer Exerts Immunostimulatory and Possible Adjuvant Role on the Mammalian Macrophages In vitro", Cumhuriyet Science Journal, 2018.

D8. "Citric acid synthesis efficiency of Aspergillus niger in carob molasses based media.", Bioorganic Medicinal Chemistry Reports, 2018.

D9. "Immunomodulation of macrophages for bone formation.", Bioorganic Medicinal Chemistry Reports, 2018.

D10. "DNA base bioisosteres, Bis-benzoxazoles, exert anti-proliferative effect on human prostate and breast cancer cells", Journal of the Turkish Chemical Society, Section A: Chemistry, 2018.