



# Faruk Kaan Çelik

PhD Candidate, Molecular Biology and Genetics

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📍 Istanbul/Turkey

## Education

### Bogazici University, Institute of Science And Engineering

2024 -

- PhD Candidate, Molecular Biology and Genetics, GPA: 3.40/4.00
- CSL Lab, Advisor: Assoc. Prof. Dr. Necla Birgül

### Yildiz Technical University, Faculty of Arts and Science

2020-2024

- Bachelor of Science, Molecular Biology and Genetics, GPA: 3.18/4.00
- **Thesis:** Evaluation of the Effectiveness of Hesperetin-loaded PLGA Nanoparticles on U-87 MG Human Glioblastoma cells

### Aydın Değişim Anatolian High School

2016-2020

- GPA: 96,45/100

## Experiences

### TÜBİTAK STAR Fellowship

02.2024-08.2024

#### Istanbul University, Faculty of Medicine, Department of Biophysics, Prof.Dr. Leman Yalçıntepe

- **Received intern scholarship** for the project "Innovative Anticancer Approach of Salinomycin and Curcumin Loaded Functional Magnetic Nanoparticles in Breast Cancer Cells with the Combination of Cold Plasma and Pulsed Magnetic Field"
- **Techniques used:** Cell culture, MTT test, Gel electrophoresis, Western blot, Cold plasma application, Synthesis of magnetic nanoparticles, Magnetic field application and ROS determination

### Bachelor Thesis And TÜBİTAK 2209-A Project Laboratory Research

02.2024- 05.2024

#### Yıldız Technical University, Faculty of Arts and Science, Department of Molecular Biology and Genetics, Advisor: Associate Professor Ayşegül Erdemir

- **Techniques used:** Synthesis of Nanoparticles, Characterization of Nanoparticles, Cell culture, MTT Test, RNA Isolation, cDNA Synthesis and qPCR

### Long Term Internship

06.2023-01.2024

#### Istanbul University Aziz Sancar Experimental Medicine Research Institute, Department of Molecular Medicine, Prof. Dr. / Head of Department İlhan Yaylım

- Examined DNA, RNA and tissue of clinical cancer samples such as colon, gastric, lung, larynx and glioma.
- Investigated the relationship of SNPs and biochemical pathways with cancer types.
- **Techniques used:** DNA & RNA Isolation, Protein Isolation, PCR, RFLP, Gel Electrophoresis, Nanodrop, SDS-PAGE, Western Blot, qPCR, HPLC, ELISA and cDNA synthesis.

### TÜBİTAK 2209-A Project Laboratory Research

01.2023-03.2023

#### Sivas Cumhuriyet University, Department of Pharmacy, Assistant Professor Hayrani Eren Bostancı

- Analyzed new potential drugs on various cancer cell lines such as HT-29, MCF-7, PC-3, C6 and MDA-10
- **Techniques used:** Preparation and characterization of New Syntheses, Cell Culture, MTT Test, Antioxidant Test (FRAP) and Antimicrobial Activity Test

## Projects & Publications

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- Investigation of the role of CTLA-4 +49A/G (rs231775) polymorphism in non-small cell lung cancer and T cell immunity** 09.2024
- Participated the research during my long-term internship
  - **Published in the Indian Journal of Experimental Biology**
- Design, synthesis, anticancer, antioxidant, antimicrobial activities and carbonic anhydrase I-II inhibition, and molecular docking studies of benzimidazole derivatives bearing oxadiazole moiety** 07.2024
- My first TÜBİTAK 2209-A project was part of this research,
  - Will be published in the Journal of Molecular Structure
- Development of Intranasal Dual-Component Drug-Loaded In Situ Gel Formulation for Glioblastoma Treatment** 02.2024
- Applied to the TEKNOFEST Biotechnology and Innovation Competition Idea Category, "GLIO-JEL" Team Leader
- Investigation of the Cytotoxic Effects of Arum Dioscoridis Plant Extract on HT-29 Cancer Cells** 12.2023
- Oral presented in the IXth International Congress of Molecular Medicine
- Investigation of the Protective Effect of Origanium Hypericifolium Extracts on T-BHP Induced Oxidative Damage in Fibroblast Cell Line** 11.2023
- Oral presented in the VIIIth In Vitro Diagnostics "Preclinical Modeling" Symposium
  - **Published in the SCI indexed Turkish Journal Of Biochemistry.**
- Quercetin Loaded Polyvinyl Butyral/Polyethylene Glycol-Nanoclay Biomaterial Development of Systems by Solvent Casting Method and Used as Wound Dressing Examination of In vitro Activities** 10.2023
- A new drug loaded-nanofiber film was tested on fibroblasts.
- Investigation of the Effectiveness of Hesperetin-loaded PLGA Nanoparticles on U-87 MG Human Glioblastoma Cells** 10.2023
- **This project was supported by the Scientific and Technological Research Council of Turkey (TÜBİTAK) with the 2209 - A "Undergraduate Students Research Support Scholarship".**
  - A drug loaded-biocomposite was tested on human glioblastoma cells.
  - Presented in the TÜBİTAK 2209 A/B SCIENCE and MATHEMATICS STUDENT WORKSHOP, **honored to the Best Poster Presentation Award**
- "HEALTH&SCIENCE 2023-II" Published by EFE AKADEMİ Publishing House** 07.2023
- Co-authored in the chapter titled "Immunotherapy in Cancer Treatment" in the internationally published book.
- Characterization of New Benzimidazole Derivatives and Their Cytotoxic Properties and Antioxidant Properties in Cancer Cell Lines** 03.2023
- **This project was supported by the Scientific and Technological Research Council of Turkey (TÜBİTAK) with the 2209 - A "Undergraduate Students Research Support Scholarship".**
  - A new synthesis drug molecules was tested on fibroblast, colon cancer and lung cancer cell lines.

## Certificates

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<b>IXth International Congress of Molecular Medicine Turkish Society of Molecular Medicine</b>	<b>12.2023</b>
<b>VIIIth In Vitro Diagnostics "Preclinical Modeling" Symposium Turkish Biochemistry Association</b>	<b>11.2023</b>
<b>VIIIth Research Applications Course in Oncology - Cancer Immune Targeting Dokuz Eylül University Oncology Institute</b>	<b>09.2023</b>
<b>3rd International Multidisciplinary Cancer Research Congress Molecular Cancer Research Association (MOKAD)</b>	<b>09.2023</b>
<b>Volunteer Instructor at "Science Fair'23" Event in Darüşşafaka Educational Institutions</b>	<b>05.2023</b>
<b>ISO Basic – Internal Audit – Documentation Certificates</b>	<b>12.2022</b>
ISO 9001:2015 Quality Management System	
ISO 22000:2018 Food Safety Management System	
ISO 14001:2015 Environmental Management System	
ISO 45001:2018 Occupational Health and Safety Management System	

## Language

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- Turkish, Native
- English, C1, IELTS (7/9), YÖKDİL (87,5/100)
- German, A1
- Spanish, A2

## Skills

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- MS Office
- NCBI BLAST
- MATLAB
- Expasy
- Molecular Docking
- Problem-solving
- GraphPad Prism
- Communication Skills
- Motif Elicitation
- Management

## Scholarships

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- Granted TÜBİTAK 2211-A PhD Scholarship, 12.2024 -
- Granted TÜBİTAK STAR Research Scholarship, 02.2024 - 08.2024