

BIHTER ÖZDEMİR-AYGENLI

SCIENTIST, PhD CANDIDATE in BIOCHEMISTRY

CONTACT

[linkedin.com/in/bihter-aygenli](https://www.linkedin.com/in/bihter-aygenli)

TECHNICAL SKILLS

HPLC TECHNIQUES

Affinity chromatography
Ion-exchange chromatography
Column chromatography

BIOCHEMICAL TECHNIQUES

PCR
Gene engineering techniques
Protein Expression
SDS-PAGE
Enzymatic activity assays
Nanopore sequencing
Negative Staining EM

CELL CULTURE

Cell viability assays
Transfection
Co-IP
Wound healing assays

SOFT SKILLS

Communications- collaborations, Poster presentations **Leadership-** Teaching Assistant, Supervised 3 Undergraduate students, SciGether, **Education Coordinator** Yeditepe University Biotechnology **Society Chair**

PROFILE

Results-oriented biochemistry specialist skilled in protein purifications, enzymatic assays, cloning, cell culture and HPLC techniques. Proficient in diverse lab methodologies for biomolecule extraction and analysis. Passionate about translating scientific discoveries into real-world impact. My goal is to thrive in a more interactive landscape, leveraging my skills to drive innovation in the life sciences.

EXPERIENCE

HELMHOLTZ ZENTRUM MUNCHEN • SEPT 2020-APR 2024

Doctoral Researcher, Institute of Functional Epigenetics, Munich Germany

- Coordinated an international research collaboration bridging Paris and Munich.
- Expertise in the expression, purification of various enzymes, and conducting in-vitro enzymatic activity assays for functional characterization, notably focusing on E3 enzyme.
- Applied multiple gene editing techniques, such as transfection and cloning, to explore the enzymatic activity of E3 enzyme.

YEDITEPE UNIVERSITY • SEPT 2012- JULY 2020

Graduate Research Assistant, Genetics and Bioengineering Department, Istanbul, Turkey

- Explored the synergistic effects of Berberine and Sorafenib on Hepatocellular carcinoma cell lines through comprehensive investigation.
- Mass- spectrometry based novel biomarker discovery in ALS and Alzheimer disease by extracellular vesicles and exosomes.

Graduate and Undergraduate Teaching Assistant, Genetics and Bioengineering Department, Istanbul, Turkey

GBE111-Biology & GBE302-Biochemistry

- Preparation and maintenance of the schedules and instructions for each lab session. Supervise and oversee laboratory-related educational materials (quiz, assignment, midterm, and final exams).

ASTON UNIVERSITY • JUNE 2016- AUG 2016

Intern, School of Biosciences, Birmingham, UK

- Autophagy analysis of *C. Elegans* manipulated by using RNAi targeting mTOR and Raptor.

IT SKILLS

Proficiency in
MS-Office

Analysis with
R-programming, GraphPad,
SnapGene, ImageLab, ImageJ,

User of Mascot, MaxQuant,
Unicorn Software

LANGUAGE

Turkish- Mother Tongue
English- Fluent
German- Beginner

HONORS

Selected representative of
IRTG1064 program in the Spetses
Summer School
Biotechnology Graduate program,
High Honors Degree, Yeditepe
University

INTERESTS

SciGether, Education Coordinator,
Since 2020

Yeditepe University Biotechnology
Society, Chair, 2015- 2017

EDUCATION

LUDWIG MAXIMILLIAN UNIVERSITY • SEPT 2020-APR 2024

PhD, Doctor of Philosophy, Biology Department, Munich, Germany

Thesis Title: Functional Characterization of E3 ubiquitin ligase UHRF1

YEDITEPE UNIVERSITY • SEPT 2017- JULY 2020

MSc, Master of Science, Genetics and Bioengineering Department,
Istanbul, Turkey

Thesis Title: Investigation of Combinatory Effects of Sorafenib and 3-
Bromopyruvate on Hepatocellular Carcinoma Cell Line

YEDITEPE UNIVERSITY • SEPT 2012- JUNE 2017

BSc, Bachelor of Science, Genetics and Bioengineering Department,
Istanbul, Turkey

Thesis Title: Adhesion and Migration Potential of Everolimus Resistant
Kidney Cancer Cells

TRAININGS

Biotechnology Quality Manager Certificate, Workshop, Dr, Christian
Grothe- Westrick

Good Scientific Practice, HelmholtzZentrum München

Introduction to R, Core Facility Statistical Consulting, Helmholtz
Zentrum München

Certificate of Animal Use in Experimental Research (Certificate
Number: YUDHKXII/32)

PRESENTATIONS

14th Munich Chromatin Day, **Oral Presentation**, Munich, Germany

- Functional Characterization of E3 ubiquitin Ligase UHRF1
Spetses Summer School- Cancer Epigenetics - Principles, Applications
and Single-Cell Resolution, **Poster Presentation**, Spetses, Greece

- Functional Characterization of E3 ubiquitin Ligase UHRF1
Experimental Biology Congress, **Poster Presentation**, San Diego, USA

- Proteomic Analyses of Plant Exosomes

PUBLICATIONS

Saulius Lukauskas, Andrey Tvardovskiy, Nhung V. Nguyen, ..., **Bihter Özdemir Aygenli**, Scarlett Dornauer, ..., Till Bartke, "Decoding Chromatin States by Proteomic Profiling of Nucleosome Readers" *Nature*, 2023.

Kırbaş, OK., ..., **Ozdemir B.**, .. and Taşlı PN., "Optimized Isolation of Extracellular Vesicles from Various Organic Sources Using Aqueous Two-Phase System" *Scientific Reports*, 2019.