

METE BORA TÜZÜNER

İkbaliye mah. Pomak sok. No:13/15 Acıbadem Kadıköy İstanbul-Türkiye

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[Linked In Profile](#) [ResearchGate Profile](#)

SUMMARY

- R&D responsible in a clinical laboratory with 11 years of experience in writing and managing scientific projects as well as working hands on in the laboratory.
- Adept in multitasking, while teaching at university and working in R&D center in a clinical laboratory.
- Can execute article writing, managing laboratory crew and work as an independent researcher

RESEARCH INTERESTS

- Molecular mechanisms of diseases
- Cancer research
- "-omics" based research

ACADEMIC EXPERIENCE

- **Asistant Proffesor, Part time**

Bahcesehir University, Molecular Biology & Genetics Dept.

02.2019 – | Istanbul - Turkey

- Applications of Pharmacogenomics*
- Cellular and Molecular Biochemistry*
- Essentials of Organic Chemistry*

- **Visiting Researcher**

Molecular Medicine Dept.
Institute of Experimental Medicine, Istanbul University

09.2011 – 12.2012 | Istanbul-Turkey

- *Participated in "Investigation of the effects of honey and propolis to miRNA profile and Genomic Expression levels in Breast Cancer Cell Lines" project within the "Healthy Living Platform with Honey and Other Bee Products", funded via Istanbul Development Agency (ISTKA) grant*
- *Cell culture (MCF7, SKBR3, MDA-MB 231, MCF10A)*
- *Cell proliferation and cytotoxicity assay (WST-1)*
- *Apoptosis assay (Annexin V)*
- *Bioinformatic analysis (IPA, STRING, REACTOME)*

- **Visiting Researcher**

Research Area Molecular Biotechnology and Microbiology,
Institute of Chemical Engineering, Vienna University of Technology

02.2011 – 06.2011 | Vienna - Austria

- *Construction of a new vector bearing the Geneticin-resistance gene employing the Gateway cloning system*
- *Employing Yeast- 2-Hybrid System to screen a cDNA library of *Trichoderma atroviride* to obtain putative interaction partners*
- *Cultivations of *T. atroviride* wild-type and mutants in confrontation with host fungi*
- *Isolation of RNA for microarray analysis*

- **Visiting Researcher**

Unit of Clinical Microbiology, Regional Reference Centre for Microbiological Emergencies (CRREM),
St Orsola-Malpighi University Hospital

10.2010 – 11.2010 | Bologna - Italy

- WNV IgG testing by ELISA and IFA
- Microneutralization assay (MNTA)
- Avidity test by IgG avidity assay
- Titration of IgG seropositive samples by IFA against USUV

PROFFESIONAL EXPERIENCE

- **R&D Responsible**

Acibadem LabMed Clinical Laboratories, R&D Center

05.2017 – | Istanbul - Turkey

- Development of new test-analysis systems for clinical use,
- Research on molecular mechanisms of cancer and neurodegenerative diseases,
- Writing project proposals for national & international grants,
- Maintaining R&D lab coordination under the supervision of R&D manager

- **R&D Manager**

Dia Pro Medical Products Company

08.2016 – 12.2016 | Kocaeli - Turkey

- Research on antibody and reaction stability
- Development of PaGIA based serology tests for Syphilis, Brucella, Echinococcus,
- RCSS

- **Project Manager**

Ekinler Endüstri, Healthcare Department

08.2013 – 08.2016 | Istanbul - Turkey

- Pursuing latest technological developments in biomedical devices
- Writing project proposals for national & international grants
- Knowledge of MOH regulations

- **Research and Development Engineer**

Zivak Technologies

02.2013 - 08.2013 | Istanbul - Turkey

- Development of new kits for steroid analysis in LC-MS/MS
- Development of HPLC kits for detection phenylketonuria in human serum & plasma samples.

- **Laboratory Operator**

Acibadem Labmed, Molecular Microbiology Department

07.2009 - 09.2009 | Istanbul - Turkey

- Automated total DNA/RNA extraction and purification
- Real-time RT-PCR of viral isolates for influenza samples
- TaqMan probes and Invitrogen SuperScript III Platinum One-Step Quantitative Kit use
- Detection of swine flu (H1N1), influenza A, B, H1, H3, Norovirus by qRT-PCR
- RT-PCR on Roche-LightCycler-II and Rotor Gen – Qiagen

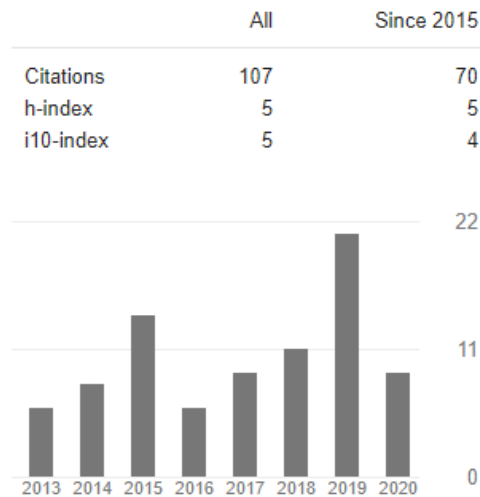
EDUCATION

- **Istanbul Technical University, Institute of Science and Technology**
 Programme: Phd in Molecular Biology-Genetics and Biotechnology
 Duration: 2009-2017
- **Istanbul University, Institute of Health Sciences**
 Programme: MSc in Molecular Medicine
 Duration: 2006-2008
- **Ege University, Faculty of Science**
 Programme: Biochemistry Majored in Biotechnology
 Year of Graduation: 2002-2006

PROJECT EXPERIENCE

- Metabolic Flux Profiling of Streidogenesis Pathway in Breast Tumor and Its Peripheral Tissue and Comparasion with Clinical Findings, 01/12/2018- On going, Prnciple Investigator, TUBITAK ARDEB 3001
- Identification of Genetic and Metabolic Biomarkers for endometrial receptivity of embryo and assay development. 01/01/2018 - On going, Researcher, TÜBITAK TEYDEB 1501
- The investigation of onset mechanisms in 5xfad Transgenic Alzheimer Disease Mouse Model with Proteomic Methods, 01/09/2017- On going, Researcher, TÜBITAK 1001

PUBLICATIONS



- **Tuzuner MB, Ozturk T, İlvan Ş, Turna H, Yurdun T, Yılmaz-Aydoğan H, Ozturk O.** Local Aromatase Activity Alterations In Breast Cancer Tissues: A Potential Way Of Decision Support For Clinicians. medRxiv 2020.06.04.20122101; doi: <https://doi.org/10.1101/2020.06.04.20122101>
- **E Akgun, MB Tuzuner, B Sahin, M Kilercik, C Kulah et al.** Altered Molecular Pathways Observed In Naso-Oropharyngeal Samples Of Sars-Cov-2 Patients. medRxiv 2020.05.14.20102558; doi: <https://doi.org/10.1101/2020.05.14.20102558>

- Kocael, A., Eronat, A.P., **Tuzuner, M.B.** et al. "Interpretation of the effect of CYP2C9, VKORC1 and CYP4F2 variants on warfarin dosing adjustment in Turkey" *Mol Biol Rep* 2019 46: 1825.
- Timirci-Kahraman O, Karaaslan Z, Tuzun E, Kurtuncu M, Baykal AT, Gunduz T, Akgun E, Gurel B, **Tuzuner MB**, Eraksoy M, Kucukali CI. "Identification of candidate biomarkers in converting and non-converting clinically isolated syndrome by proteomics analysis of cerebrospinal fluid.", 2019 *Acta Neurologica Belgica* 119 (1), 101-111
- Acioglu C, **Tuzuner MB**, Serhatli M, Acilan C, Baykal B, Akgun E, Adiguzel Z, Baykal AT. "A Proteomic Analysis of Mitochondrial Complex III Inhibition in SH-SY5Y Human Neuroblastoma Cell Line" *Curr. Proteomics* 2018,16 (2), 136-147.
- Mazi AR, Arzuman AS, Gurel B, Sahin B, **Tuzuner MB**, Ozansoy M, Baykal AT. "Neonatal Neurodegeneration In Alzheimer's Disease Transgenic Mouse Model", *Journal of Alzheimer's Disease Reports*, 2 (1), 79-91, 2018
- Tokat B, Ozturk T, MF, Calay Z, Ilvan S, **Tuzuner MB**, Ozturk O, Yilmaz-Aydogan H. "Effects of haplotypes for two leukocyte diapedesis-related genes, LFA-1 and JAM-A genes on breast cancer risk.", *International Journal of Hematology and Oncology* 2018 28 (1), 045-052
- Gurel, B, Cansev M, Sevinc C, Kelestemur S, Ocalan B, Cakir A, Aydin S, Kahveci N, Ozansoy M, Taskapilioglu O, Ulus IH, Başar M, Sahin B, **Tuzuner MB**, Baykal AT "Early Stage Alterations in CA1 Extracellular Region Proteins Indicate Dysregulation of IL6 and Iron Homeostasis in the 5XFAD Alzheimer's Disease Mouse Model", *JAD*, 2018 : 1399 – 1410
- **Tuzuner MB**, Ozturk T, Eronat AP, Seyhan MF, Kisakesen HI, Calay Z, İlvan Ş, Turna H, Yılmaz-Aydoğan H, Bermek H, Ozturk O. "Evaluation of Local CYP17A1 and CYP19A1 Expression Levels as Prognostic Factors in Postmenopausal Invasive Ductal Breast Cancer Cases.", *Biochem Genet.* 2016 54: 784.
- Ozturk T, Kucukhuseyin O, Eronat AP, **Tuzuner BM**, Daglar-Aday A, Saygili N, Kisakesen HI, Seyhan MF, Velidedeoglu M, Yilmaz-Aydoğan H, Ozturk O, Isbir T. "Preliminary study: Prominent miRNAs of breast malignant tissues compared to normal tissues in Turkish breast cancer patients.", *Anticancer Res.* 2015 Oct;35(10):5425-32.
- Karakoc C, **Tuzuner BM**, Ergonul MO, Pierro A, Fonzi E, Sambri V. "West Nile Virus Infection in Mesopotomia region, Syria border of Turkey.", *Vector Borne Zoonotic Dis.* 2013 Oct;13(10):739-43.
- Ozbek YK, Oztürk T, **Tuzuner BM**, Calay Z, Ilvan S, Seyhan FM, Kisakesen HI, Oztürk O, Isbir T. "Combined effect of CYP1B1 codon 432 polymorphism and N-acetyltransferase 2 slow acetylator phenotypes in relation to breast cancer in the Turkish population.", *Anticancer Res.* 2010; 30(7):2885-9.
- **Tuzuner BM**, Oztürk T, Kisakesen HI, Ilvan S, Zerrin C, Oztürk O, Isbir T. "CYP17 (T-34C) and CYP19 (Trp39Arg) polymorphisms and their cooperative effects on breast cancer susceptibility.", *In Vivo.* 2010; 24(1):71-4.
- Kağnici OF, Oztürk T, Durak H, **Tuzuner BM**, Kisakesen HI, Cakalir C, Isbir T. "192R allele of paraoxanase 1 (PON1) gene as a new marker for susceptibility to bladder cancer.", *Anticancer Res.* 2009; 29(10):4041-6.

SELECTED CONFERENCE PRESENTATIONS

- **MB Tuzuner**, B Tuzuner, T Ozturk, AP Eronat, B Ceviz, G Candan, S Ilvan, H Yilmaz-Aydogan, A Yarat, O Ozturk. Crosstalk of breast tumors and tumor associated stromal tissues: its association with the oxidative stress index, tissue factor and aromatase activity. *FEBS 2018 Congress*, July 2018, Prague-Czech Republic (poster presentation).
- **MB Tuzuner**. The emerging role of proteomics in breast cancer research, *International Meeting on Education and Research in Health Sciences (IMER-HS)* November 2017, İstanbul-Turkey (Oral presentation).

- **MB Tuzuner**, T Ozturk, AP Eronat, B Ceviz, G Candan, S Ilvan, H Yilmaz-Aydogan O Ozturk. Östrojen Bağımlı Meme Kanserlerinde İntrakrinolojik Yaklaşım ve Aromataz Aktivitesinin Rolü. Uluslararası Biyokimya Kongresi – 2017 / 28. Ulusal Biyokimya Kongresi, September 2017, Erzurum-Turkey. (Oral presentation).
- Öztürk T, Küçükhüseyin Ö, **Tüzüner BM**, Dağlar A, Saygılı N, Seyhan, İlvan Ş, Calay Z, Öztürk O. Alterations of some breast cancer related miRNA expression levels in invasive ductal cases: A retrospective study. The EMBO Meeting 2013, Amsterdam, NL September 21-24, 2013.(poster presentation)
- M.F. Seyhan, O. Kurt, L.M. Yurdum, O. Kucukhuseyin, A.P. Eronat, O.T. Kahraman, **M.B. Tuzuner**, O. Ozturk. Investigation of CYP1A2*F and CYP1A2*D gene polymorphisms in Turkish breast cancer patients. The EMBO Meeting 2013, Amsterdam, NL September 21-24, 2013.(poster presentation)
- **Tüzüner BM**, Timirci-Kahraman O, Saygılı N, Kısakesen HI, Yılmaz E, Yılmaz-Aydoğan H, Bilgiç S, Öztürk T, Seyhan MF, Eronat AP, Öztürk O. The effect of Apis Mellifera’s propolis on cell cycle pathway in MCF7 breast cancer cell line. Miami 2013 Winter Symposium – The Molecular Basis of Metabolism and Nutrition. Miami, FL, USA February 10-13, 2013.(poster presentation)
- Timirci-Kahraman O, Saygılı N, Kısakesen HI, Yılmaz E, Yılmaz-Aydoğan H, Bilgiç S, Öztürk T, Seyhan MF, Eronat AP, **Tüzüner BM**, Öztürk O. The effects of propolis with different geographic origin on whole genome expression profile of MCF7 breast cancer cells. 10th National Medical Genetics Congress. 19-23 December 2012, Bursa. (Oral presentation)
- Saygılı N, Timirci-Kahraman O, Kısakesen HI, Yılmaz E, Yılmaz-Aydoğan H, Bilgiç S, Öztürk T, Seyhan MF, Eronat AP, **Tüzüner BM**, Öztürk O. The effects of propolis with different geographic origin on miRNA expression profile of MCF7 breast cancer cells. 4th Multidisipliner Cancer Research Congress. 13-16 December 2012, Bursa. (Oral presentation)
- **Tuzuner MB**, Ozturk T, Calay Z, et al. : The relationship between estrogen metabolism genes CYP 17, CYP 19 and breast cancer. IUBMB LIFE 61(3): 366-366 March 2009. (poster presentation)
- Ozbek YK, Ozturk T, **Tuzuner MB**, et al.: Investigation of gene polymorphisms of CYP1B1 and NAT2 detoxification enzymes in patients with breast cancer in Turkish population. IUBMB LIFE 61(3): 366-366, March 2009. (poster presentation)
- Kagnici OF, Ozturk T, **Tuzuner MB**, et al.: Effects of CYP1A1, GSTM1, GSTT1 and GSTP1 gene polymorphisms on colon cancer risk in Turkish population. IUBMB LIFE 61(3): 366-366, March 2009. (poster presentation)
- Ö.Kağnıcı, T.Öztürk, **M.Tüzüner**, A.Dağlar, Y.Özbek, O.Öztürk, T.İşbir: “Association Between PON 1 Polymorphisms and Transitional Cell Bladder Cancer in Turkish Population,” 2nd National Molecular Medicine Congress 24-26 March 2007,İstanbul (poster presentation)

HONOURS & AWARDS

- FEBS 2018 Congress Young Investigator Bursary- 2018
- Gonul Kulahcioglu Cancer Research Bursary - 2016
- Best oral presentation award, 1st Cell Death Research Congress, October 2013
- International Scientific Activities Support Programme Scholarship, TUBITAK 2224-A, July 2012

PROFESSIONAL ASSOCIATIONS

- Turkish Society of Molecular Medicine
- Turkish Biochemical Society
- The Proteomics Society-Turkey

