

Dr. Elif Sibel Aslan

Title: Doctoral Lecturer

Education: Doctorate Degree University Year Bachelor Biology Erciyes University/Kayseri 1994 M.Sc. Applied Microbiology-(MSc on Applied Microbiology) Westminster University London/UK 1999 PhD Molecular Biology and Genetics London Metropolitan University London/ UK 2006 Academic Titles: Assistant Professor Date : 15.09.2014 Department of Molecular Biology and Genetics, Biruni University, Istanbul. Managed Master's and Doctoral Theses Master's Theses

1) Molecular and Medical Genetics Master Thesis. 2017, Biruni University Nur Deniz Dibek “In vitro Characterization of Cancer Stem Cell-Specific miRNAs in Laryngeal Cancer Cells”.

2) Molecular and Medical Genetics Master Thesis. 2017, Biruni University Büşra Büyüközer “Determination of Expression Levels of Kallikrein (KLK) Gene Family in Prostate Cancer”.

3) Molecular and Medical Genetics Master Thesis. 2018, Biruni University Afshan Babazade “Investigation of the Effect of Specific Oncomyr microRNAs with Altered Methylation Patterns on Prostate Cancer”.

4) Clinical Embryology Master Thesis. 2019, Biruni University Esin Sude Genç “The Effect of Antioxidant Therapy Applied to Men on Recurrent Pregnancy Loss: A Meta-Analysis Study”.

5) Molecular and Medical Genetics Master Thesis. 2020, Biruni University, Mete Emir Özgürses “Real Time Imaging of Nitric Oxide (NO) Signals Derived from Differentially Targeted Endothelial Nitric Oxide Synthases (eNOS) Using Genetically Encoded Biosensors”.

6) Molecular and Medical Genetics Master Thesis. 2022, Biruni University, Iman Ali Jama. 2 “Advanced parental age association with the development of autism spectrum disorder in children: Meta-Analysis”. PhD Thesis Cansu Hemşinlioğlu/ Molecular and Medical Genetics PhD Thesis, 2020-2022. “Development of Transgenic Stem Cell Platform for Hemophilia A Gene Therapy and Its In Vitro Efficiency” Publications Articles published in international peer-reviewed journals (SCI & SSCI & Arts and Humanities)

1) Turkdogan D, Usluer S, Akalin F, Agyuz U, Aslan ES. 2017. Familial early infantile epileptic encephalopathy and cardiac conduction disorder: A rare cause of SUDEP infancy, *Seizure*, vol:50:171-172, DOI: <https://doi.org/10.1016/j.seizure.2017.06.019>

2) Elif S. Aslan and Kenneth N. White, Basharut A. Syed, Kaila S. Srail, Robert W. Evans, 2020. Expression of soluble active fluorescently tagged hephaestin in COS and CHO cell lines. doi:10.3906/biy-2005-39 *Turk J Biol* 44:6, 393-405

3) Guzel, E.; Buyukozer, B.; Ozen, M.; Ittmann, M.; Aslan, S. E. 2020, Identification of the kallikrein gene family as biomarkers for recurrent prostate cancer. *CMJ*, DOI:10.3325/cmj.2020.61.450 61(5), 450-456

4) Elif Sibel Aslan, Sefa Çetinkaya, 2020. Use of miRNA as a Biomarker in Prostate Cancer and New Approaches. *Turk J Oncol* 2020;35(1):99–113 DOI: 10.5505/tjo.2019.2202 Review

5) Kübra Koçdemir, Fatma Şen, Yasin Adem Wedajo, Muazzez Çağla Bilgici, Mustafa Bayram, İlke Selçuk, Berin Yılmaz, Mehmet Mervan Çakar, Elif Sibel Aslan & Barış Binay, 2020. Investigation new positions for catalytic activity of *Chaetomium thermophilum*

and Ceriporiopsis subvermispora formate dehydrogenases. Biocatalysis and Biotransformation. Vol. 39, no. 4:302-312, doi.org/10.1080/10242422.2020.1863951

6) Ar E., Demiroğlu A., Yılmaz M. S., Yılmaz B., Aslan E. S., Binay B. 2021. Enhancing recombinant Chaetomium thermophilum Formate Dehydrogenase Expression with CRISPR Technology. The Protein Journal. 40, 504-511.

7) Şeyda Demirkol, Nasim Kherad, Elif Sibel Aslan, Saadet Busra Aksoyer Sezgin, Sema Ketenci, Ebru Nur Ay, İlhan Yaylim, and Meryem Alagoz. 2021. Current Insights on SARS-Cov-2 and its Pathogenicity. Journal of Biochemistry & Molecular Biology, ISSN 2471-8084. Vol.7 No.4:17

8) Meryem Alagoz, Nasim Kherad, Huseyin Avni Solgun, Alper Ozkılıc, Elif Sibel Aslan, Sureyya Bozkurt, Şeyda Demirkol, Adnan Yuksel. 2021, DLG3 Impairment Caused by Missense Variants in Non-Syndromic X-Linked Mental Retardation. Journal of Molecular Neuroscience. DOI: 10.21203/rs.3.rs-692598/v1, preprint

9) Sultan R. M., Aslan, E. S., Seflekci, Y., & Celik, Y. Effects of Dietary Fiber in Patients with Type-2 Diabetes Mellitus: A Meta Analysis. International Journal of Basic and Clinical Studies 3 (IJBCS) 2022; 11(1): 9-21

10) Elif Sibel Aslan, Hüseyin Aydın, Yusuf Kenan Tekin, Sami Keleş, Kenneth N. White, Nezih Hekim. 2022. Association between iron metabolism and sars-cov-2 infection, determined by ferritin, hephaestin and hypoxia-induced factor-1 alpha levels in covid-19 patients. Molecular Biology Reports. Submitted

11) Onur, H., Tülek, A., Yıldırım, D., Aslan, E. S., & Binay, B. A New Highly Enantioselective Stable Epoxide Hydrolase from Hypsibius Dujardini: Expression In Pichia Pastoris and Immobilization in Zif-8 for Asymmetric Hydrolysis of Racemic Styrene Oxide. Available at SSRN 4157278.

Papers presented at international scientific meetings and published in the proceedings book

- Oral presentation, Elif Sibel Aslan, Hakan Onur, Ahmet Tülek, Barış Binay, Antalya/Turkey, November 4-7, 2021. “Expression and Biochemical Characterization of Hypsibius dujardini Epoxide Hydrolase (HdEH) Enzyme in Pichia pastoris”. 3th International EBAT Congress.

- Oral presentation, Hakan ONUR, Barış BİNAY, Elif Sibel ASLAN, 13. ProStab (International Conference on Protein Stabilization, 07-09 Ekim 2021, Plovdiv, Bulgari Expression and Biochemical Characterization of Hypsibius dujardini EpoxideHydrolase (HdEH) Enzyme in Pichia pastoris

- Oral presentation, Cilem Ercan, Ahmet Elbay, Elif Sibel Aslan, Nehir Özdemir Özgentürk Ankara/Turkey, December 16-18, 2020. “miR-626 inhibits mTOR activity of retinal pigment epithelial cells by targeting SLC7A5 and Inducing effect on age-related macular degeneration”. ISBN: 978-625-409-179-7 International Eurasian Conference on Biotechnology and Biochemistry (BioTechBioChem 2020).

- Oral presentation, E. Aslan, K.N. White Ankara/Turkey 28-29 June 2019, "Localisation Study of Hephaestin and Ireg1 Proteins in MDCK cell line". 2nd International Eurasian Conference on Biological and Chemical Sciences (EURASIANBIOCHEM 2019).
- Oral presentation, E. Aslan, İzmir/Turkey 5-6 April 2019, "Iron metabolism and cotransfection study of Hephaestin and Ireg1 in Caco2 cell line" . Erasmus International Academic Research Symposium.
- Oral presentation, E. S. Aslan, F. Büşra Büyüközer Ankara/ Turkey 22/23 Kasım 2018, "Kallikrein (KLK) Gene Family in Prostate Cancer". International Eurasian Conference on Science, Engineering and Technology (EURASIANSCIENTECH 2018). 4
- Oral and Poster presentation, E.S. Aslan, Antalya/Turkey 27-30 October 2018, "Understanding of Iron Efflux Mechanism by Genetically Designed Hephaestin in Different Cell Lines". 1.EBAT Eurasia Biochemical Approaches Technologies Congress.
- Poster Presentation, Mohammed RA Jalaludeen, Elif S. Aslan, Ravindrath M Velaga, Robert W Evans, Kenneth N White. Abcam March 2011, "Localisation of the Ferroxidase Hephaestin and its Interaction with Transferrin" .
- Institute for Health Research and Policy, Faculty of Life Sciences, London Metropolitan University, 166-220 Holloway Road, London N7 8DB UK; 2Division of Biosciences, Brunel University, Uxbridge, UB8 3PH, UK.
- Poster presentation, E. Aslan, 2005, London/King's Collage, "The Role of Hephaestin in Systemic Iron Hemeostasis". Biometals.
- Poster presentation, E. Aslan, 2004, Germany/Garmisch-Partenkirchen, "Expression and Characterisation of Soluble Hephaestin", Biometals.
- Poster presentation, E. Aslan, 2004, Glasgow/UK, "The Role of Hephaestin in dietary iron absorption" Bioscience.
- Poster presentation, E. Aslan, 2002, Turkey/Istanbul, "Expression, activity and localisation of Recombinant Hephaestin", FEBS.
- Poster presentation, E. Aslan, 2002, Queen Marry University "Expression of Hephaestin" IBDG.
- E. Aslan, 2002, 3rd International Biometals Symposium, King's College London, "Expression, activity and localisation of Recombinant Hephaestin" Biometals
- E. Aslan, 2001, London Metropolitan University, "Characterisation of Recombinant Hephaestin", IBDG. International books or chapters in books written

- Elif Sibel Aslan 2021, Current Knowledge on Iron Metabolism and Iron Deficiency Anemia, INSAC Academic Studies on Sciences Natural and Engineering, Chapter 1, pg. 13-32, ISBN: 978-625-7462-42-6.
- Elif Sibel Aslan 2021, “Galectin Family and Importance of Galectin-1”, Platanus Book, Current Studies in Health Sciences, Chapter 1, pg. 5-21, ISBN: 978-625-7680-96-7.
- Gülsen Meral, Elif Sibel Aslan 2022. “Molecular Biology and Genetics” book, Chapter title: Epigenetics and Nutrigenetics”. Submitted. Articles published in national peer-reviewed journals
 - 1) Elif Sibel Aslan 2015, Molecular effects of nutrients on genetic variations, Journal of Turkish Clinics, Special Issue of Nutrition and Genetics, Volume:1 Issue:3 Pages:19-24 5
 - 2) Betül Yüçetürk, İlknur Suer, Elif Sibel Aslan, Mustafa Özen 2015, Genetik Heritage, Journal of Turkish Clinics, Nutrition and Genetics special issue, Year:2015 Volume:1 Issue:3 Page:6-10
 - 3) Elif Sibel Aslan, 2016, New Generation Approach to Immunodeficiency, Journal of Turkish Clinics, Basic Medical Sciences special issue, Volume:1 Issue:2 Pages:37-41
 - 4) Abdullilah Ece, Elif Sibel Aslan 2016, The Importance of Personalized Treatment and the Contribution of New Generation DNA Sequencing Technologies, Special Issue of Basic Medical Sciences, Journal of Turkish Clinics Volume:1 Issue:2 Page:42-45 Papers presented at national scientific meetings and published in the proceedings book Other publications
- Projects
 - 1002 – Quick support, 120Z184 TÜBİTAK project coordinator, “Production and Biochemical Characterization of Hypsibius dujardini Epoxide Hydrolase Enzyme in Pichia pastoris”, in effect, 15.09.2020-15.09.2021
 - 2209-A, 1919B012001274 TÜBİTAK University Students Research Projects Support Program, Consultant, “Tardigrade and biological clock relationship: Investigation of the Clock gene in Drosophila cell line” Project Start Date 05/10/2020 - Project End Date 31/03/2021
 - 1002 - Rapid support, 214S624 TÜBİTAK researcher, “Investigation of genetic etiology by exome sequencing in patients diagnosed with epileptic encephalopathy”. Completed, 01.04.2015-01.04.2016.
 - 3001-214S371 TÜBİTAK Initial R&D Researcher/Specialist, “Evaluation of miRNA levels before and after electroconvulsive therapy in patients with schizophrenia”. Completed. 15.04.2015-15.07.2016
 - CREST workshops 2006- Tutor; (London Metropolitan University); for high school students aiming to get a CREST Gold Award (Creativity in Engineering, Science and Technology) projects, pupils from Islington Schools and George Green's School (Tower Hamlets) undertaking project work on DNA extraction and characterisation. General Molecular Biology (in Bronze award), Microbiology (in Silver award), Immunology (in Golden award) at Londonmet University. Administrative Duties
 - Head of Molecular Biology and Genetics Department, Biruni University, Istanbul. 01.08.2016- 05.09.2020
 - Member of the Senate of the Faculty of Engineering and Natural Sciences. 2015-2019

- Biruni University Faculty of Engineering and Natural Sciences Erasmus Coordinator. 2016-present 6
 - Biruni University, Department of Molecular Biology Genetics, Erasmus Coordinator. 2016-present
 - Biruni University Molecular Biology Genetics Department, Bologna responsible
 - Biruni University, Institute of Health Sciences, Head of Molecular Biology and Genetics Master's and Doctorate Department 2016- Present
 - Biruni University Faculty of Engineering and Natural Sciences webmaster 2015- Present
- Membership to Scientific and Professional Organizations Epigenetics and Nutrigenetics Society Biometals & Iron Metabolism Group