

SİNEM DEMİRKAYA BUDAK

Molecular Biologist

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<https://sinemdemirkayabudak.github.io/>

Professional Experience

- 01.2016 – Ongoing
Teaching & Research Assistant, TOBB University of Economics and Technology (TOBB ETU), Ankara, TURKEY
- 07.2013 - 09.2013
Intern, Institute of Systematic Botany and Mycology, University of Munich (LMU München), Munich, GERMANY
I worked in herbarium and joined an ongoing research on a plant genus of Araceae and Cucurbitaceae that included theoretical and practical work. Also, I carried out a project about chromosome counting for three species of Caricaceae. I only contributed some parts of a bigger project. You can see this project from following link.
<http://www.springer.com/br/book/9783658102661>
- 10.2014 - 06.2015, 10.2012 - 01.2013
Special Tutor, <http://odevodtu.com>, Ankara, TURKEY
Tutoring primary and secondary education students in math and science classes.

Education

- 01.2016 – Ongoing
Master's Degree, Biomedical Engineering, TOBB University of Economics and Technology (TOBB ETU)
CGPA: 4.00 / 4.00
- 09.2015 - 01.2016
MSc, Biotechnology, Middle East Technical University (METU)
GPA: 3.25 / 4.00 - one semester
- 09.2008 - 06.2015
BSc, Molecular Biology and Genetics, Middle East Technical University (METU)
CGPA: 2.57 / 4.00
- 11.2011 - 06.2015
BSc, Business Administration (Open Education), Anadolu University
CGPA: 2.65 / 4.00

- 09.2004 - 06.2008
Mathematics and Science, Mehmet Akif Ersoy High School
Diploma grade: 93.78 / 100

Oral & Poster Presentations

- **Demirkaya Budak S**, Can Demirdöğen B, Özge G, Mumcuoğlu T. Evaluation of the effect of clusterin rs2279590 single nucleotide polymorphism in pseudoexfoliation syndrome risk and on clusterin protein level in aqueous humor. The 42nd FEBS Congress. September 10-14, 2017. Jerusalem, Israel (Poster presentation). The FEBS Journal. 2017; vol. 284 (S1) 104–392, DOI: 10.1111/febs.14174, P.1.5-054.
- Can Demirdöğen B, Yakar G, Göksoy E, **Demirkaya S**, Koçan C, Özge G, Mumcuoğlu T. Relationship between paraoxonase 1 (PON1) promoter (-107T/C) and coding region polymorphisms (192Q/R and 55L/M) and Pseudoexfoliation syndrome. The 42nd FEBS Congress. September 10-14, 2017. Jerusalem, Israel (Poster presentation). The FEBS Journal. 2017; vol. 284 (S1) 104–392, DOI: 10.1111/febs.14174, P.1.5-073.
- Göksoy E, **Demirkaya S**, Oflaz S, Özge G, Mumcuoğlu T, Can Demirdöğen B. Analysis of the relationship between PON1 (paraoxonase1) 192Q/R (rs662) polymorphism with pseudoexfoliation syndrome and pseudoexfoliative glaucoma. Erciyes Medical Genetics Days 2017. May 11-13, 2017. Kayseri, Turkey (Poster presentation). Erciyes Medical Journal. 2017; vol 39, Issue 2, PP13.
- **Demirkaya S**, Can Demirdöğen B, Özge G, Mumcuoğlu T. Analysis of the relation between clusterin rs11136000 polymorphism and pseudoexfoliation syndrome. TBD Biyokimya Günleri. November 2-5, 2016. Sivas, Turkey (Oral presentation). Turkish Journal of Biochemistry. 2016; vol 41(S3), S036.
- **Demirkaya S**, Özge G, Mumcuoglu T, Can Demirdöğen B. Evaluation of rs11136000 single nucleotide polymorphism of clusterin gene in pseudoexfoliation syndrome risk. The 41st FEBS Congress. 3-8 Eylül 2016 (Poster). The FEBS Journal 283 (Suppl. 1), 2016; pp 375. DOI: 10.1111/ febs.13808. P-08.02.5-006. (Abstract published in FEBS Journal but the poster presentation could not be done because of the cancellation of the congress).

Achievements/ Projects

- METU Certificate of High Honor: 2010-2011 Fall Semester
- Anadolu University Certificate of Honor: 2013-2014 Spring Semester
- Summer 2013 - Chromosome counting for three species of Caricaceae - *C.parviflora*, *J. caudata*, *J. heterophylla* - by using classical cytogenetic techniques and DAPI staining.
Institute of Systematic Botany and Mycology, University of Munich (LMU München), Munich, GERMANY

- Fall 2013 - Physiological and biochemical response to boron toxicity in two barley cultivars (Zafer 160 and Tarm 92). To study the effects of boron toxicity; growth of root and shoot, antioxidant defense mechanism (Ascorbate peroxidase, Catalase, Glutathione reductase), relative water content, proline content, H₂O₂ content, malondialdehyde content, protein concentration and the pigment concentration are investigated.

Middle East Technical University (METU), Ankara, TURKEY

- Spring 2014 - Laboratory practices of green microalgae (*Chlamydomonas reinhardtii*) to produce biodiesel from microalgae.

Middle East Technical University (METU), Ankara, TURKEY

Languages

- Turkish (native)
- English (fluent)

Computer Skills

- Microsoft Office (Word, Excel, Powerpoint, Access) - Advanced
- Minitab (Biostatistics Software) - Good
- R Programming - Intermediate
- BRAHMS Software - Elementary

Laboratory Skills

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| ▪ Light Microscope | ▪ Real-Time PCR |
| ▪ Fluorescence Microscope | ▪ DNA extraction |
| ▪ PCR | ▪ Enzyme assays |
| ▪ PCR-RFLP | ▪ Chromatography |
| ▪ Electrophoresis | ▪ Genetic Transformation |
| ▪ Spectrophotometry | ▪ Bacterial Culture |
| ▪ Cloning | ▪ Differential Staining |
| ▪ Biochemical tests used for identifying bacterial colonies | ▪ DNA sequencing |
| ▪ ELISA | ▪ Blotting |

Test Scores

- ALES (Exam for Admission to Academic Personel and Master Education) - 82,80
ÖSYM - 11.2017
- METU EPE (English Proficiency Exam) - 76,5
Middle East Technical University - 06.2014
- YDS (Foreign Language Test) - 80 (Class B)
ÖSYM - 04.2014

Seminars & Courses

- Design of Web Page
BELTEK - Technical Education Course of Gazi University/Ankara Metropolitan Municipality
12.04.2010 - 06.06.2010 (72 hours)

Certificates

- 42nd FEBS Congress from molecules to cells and back
FEBS Congress - 09.2017
- International Society for Computational Biology Regional Student Group - Turkey
Student Symposium 2017
ISCB - RSG - 06.2017
- HIBIT 2017 - 10th International Symposium on Health Informatics and Bioinformatics
HIBIT 2017 - 06.2017
- II. Türkiye in vitro Diyagnostik - Biyobelirteçler Sempozyumu
Türk Biyokimya Derneği - 05.2017
- Türk Biyokimya Derneği Sivas Biyokimya Günleri 2016
Türk Biyokimya Derneği - 11.2016
- 8. Aykut Kence Conference of Evolution
METU Biology and Genetics Student Club - 04.2014
- 7. National Conference of Evolution
METU Biology and Genetics Student Club - 09.2012
- BIOMED 2011
Ankara University - Stem Cell Institute - 11.2011
17th International Biomedical Science & Technology Symposium
- Gazi University Medical Faculty 2. National Student Congress
Gazi University Medical Faculty - 10.2011
- METU 10. Days of Management and Engineering
METU Productivity Club - 03.2010
10. Days of Management and Engineering, Topic: Maintainability

Memberships

- Turkish Biochemical Society (member since 2016)
- METU Biology and Genetics Student Club (BİYOGEN) (member between 2008-2009)

Interests and Hobbies

- Personalized medicine, genetic polymorphisms, molecular biology, genetics, cell biology, statistics, plant biology, biotechnology, genomics, structural biology
- Travelling, playing guitar, reading books, enjoying with music and movies

References

Doç. Dr. Birsen Can Demirdöğen
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Tel : +90 312 210 5159 / E-mail: meraly@metu.edu.tr

Prof. Dr. Susanne S. Renner
Institute of Systematic Botany and Mycology, University of Munich (LMU München),
Munich, GERMANY
Tel : +49 (0)8917 86 1250 / E-mail: renner@lrz.uni-muenchen.de