



# ÇİĞDEM SARAÇ

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### International Researcher IDs

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### Learning Knowledge

Doctorate 2005 - 2012	Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey
Postgraduate 2003 - 2005	Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey
Undergraduate 1998 - 2002	Ankara University, Fen Fakültesi, Biyoloji Bölümü, Turkey

### Foreign Languages

English, C2 Mastery

### Certificates, Courses and Trainings

Health&Medicine, Certificate of Animal Use, University of California United States, Davis (UC Davis) Department of Pharmacology, 2010

Health&Medicine, Certificate of Animal Use in Experimental Research, Gülhane Askeri Tıp Akademisi, 2008

### Dissertations

Doctorate, Study on the molecular basis of individual variation in spatial memory in rats, Middle East Technical University, Graduate School Of Natural And Applied Sciences, 2012

Postgraduate, Mitochondrial DNA (MTDNA) sequence analyses of Kangal dogs in Turkey, Middle East Technical University, Graduate School Of Natural And Applied Sciences, 2005

## Academic Titles / Tasks

Associate Professor 2023 - Continues	Akdeniz University, Faculty of Engineering, Department of Biomedical Engineering
Assistant Professor 2016 - Continues	Akdeniz University, Faculty of Engineering, Department of Biomedical Engineering
Research Assistant PhD 2013 - 2016	Akdeniz University, Faculty of Engineering, Department of Environmental Engineering
Research Assistant 2002 - 2013	Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology

## Supported Projects

1. SARAÇ Ç., KARAKURT S., Altunkaya G., Oruç G., Project Supported by Higher Education Institutions, Selenyum nanopartiküllerinin Hypericum perforatum ekstraktı ile yeşil sentezi ve insan tiroid kanserine karşı antikanserojenik etkilerinin araştırılması, 2023 - Continues
2. Saraç Ç., Özen Ş., TUBITAK Project, Resveratrol ile Muamele Edilen Glioblastoma Hücrelerinde Darbeli Elektromanyetik Alan Maruziyetinin Proapoptotik veP13K/AKT/mTOR Sinyal Yolaklarında Olası Moleküler Etkileri, 2023 - 2024
3. DERİN N., KENCEBAY MANAS C., MUNZUROĞLU M., SARAÇ Ç., Project Supported by Higher Education Institutions, Farklı Dozlarda Sodyum Metabisüfit Alımı İle Depresyon Arasındaki İlişkide Nitrik Oksitin Rolü, 2021 - 2024
4. Saraç Ç., Kandır S., Çelebioğlu H. U., Karakurt S., TUBITAK Project, Akrep Zehrinde Terapötik Potansiyeli Olan Peptitlerin Tanımlanması ve Kolon Kanseri Üzerine Antikanserojen Etkilerinin Moleküler Düzeyde İncelenmesi, 2021 - 2024
5. SARAÇ Ç., KARAKURT S., DURMUŞ İ. M., ÖZEN Ş., ÇETİN E., Project Supported by Higher Education Institutions, Darbeli Elektromanyetik Alana Kısa ve Uzun Süreli Maruziyetin Oleik Asit ile Muamele Edilen Beyin Hücrelerinde Nöronal Apoptoz Mekanizmaları Üzerine Moleküler Etkileri, 2022 - 2023
6. SARAÇ Ç., ÖZEN Ş., KARAKURT S., ŞİMŞEK T., Project Supported by Higher Education Institutions, Hidrojen Peroksit ile İndüklenmiş Oksidatif Stresli İnsan Beyin Hücre Hattında Darbeli Elektromanyetik Alan Maruziyetinin Bazı Önemli Antioksidan Enzimler Üzerine Etkilerinin Moleküler Yöntemlerle Araştırılması, 2020 - 2022
7. DERİN N., DUMAN Ö., AYDIN ASLAN M., SATI G. L., SARAÇ Ç., Project Supported by Higher Education Institutions, Prenatal postnatal sülfid maruziyetinin davranış ve öğrenme üzerine etkilerinin ve moleküler mekanizmalarının araştırılması, 2018 - 2021
8. DERİN N., AYDIN ASLAN M., SARAÇ Ç., AKÇAY G., Danişman B., KANTAR GÖK D., Project Supported by Higher Education Institutions, Farklı Dozlardaki Sülfidin Öğrenme ve Hafıza Üzerindeki Etkilerinde Asetilkolinin Rolü, 2018 - 2021
9. SARAÇ Ç., KARAKURT S., DERİN N., ÖZEN Ş., AKÇAY G., ATEŞ K., Project Supported by Higher Education Institutions, Sıçanlarda 2100 MHz frekansında farklı dozlarda RF-EMA uygulamasının öğrenme performansı ve kolinerjik yoldaki etkilerinin davranışsal testler ve moleküler yöntemlerle araştırılması, 2018 - 2020
10. SARAÇ Ç., ER H., DERİN N., KANTAR GÖK D., ÖZEN Ş., KENCEBAY MANAS C., Project Supported by Higher Education Institutions, Effects of acute and chronic exposure to both 900MHz and 2100MHz electromagnetic radiation on glutamate receptor signaling pathway, 2017 - 2020
11. DERİN N., DANIŞMAN B., AYDIN ASLAN M., KİPMEN KORGUN D., SARAÇ Ç., AKÇAY G., ÖZKAN A., Project Supported by Higher Education Institutions, Yaşlılığa Bağlı Öğrenme Değişikliklerine LKarnitinin Etkisi ve Moleküler Mekanizmaları, 2017 - 2020
12. Derin N., Saraç Ç., Satı Duran G. L., TUBITAK Project, Prenatal, Postnatal Sülfid Maruziyetinin Davranış ve Öğrenme

- Üzerine Etkilerinin ve Moleküler Mekanizmalarının Araştırılması, 2017 - 2019
13. SARAÇ Ç., GEDİK K., ER H., KENCEBAY MANAS C., BAŞARANLAR ÖNCEL G., DERİN N., ÖZEN Ş., Project Supported by Higher Education Institutions, 900-2200 MHz frekans aralığında kullanılan cep telefonlarından yayılan elektromanyetik kirliliğin çevre sağlığı üzerine etki ve mekanizmalarının deneysel olarak araştırılması, 2015 - 2016
  14. Saraç Ç., Adalı O., TÜBİTAK Project, Sıçan hipokampusunda mekansal öğrenmenin farklı safhalarında bazı Sitokrom P450 (CYP450) enzim tiplerinin ekspresyon seviyelerinin "İyi" ve "kötü" öğrenen hayvanlarda incelenmesi ve karşılaştırması, 2014 - 2015
  15. Saraç Ç., Marino S. M., TÜBİTAK Project, Protein veritabanlarındaki reaktif sistein (Cys) rezidülerinin yüksek verimli tahmini için algoritma geliştirilmesi, 2014 - 2015
  16. Adalı O., Saraç Ç., Karakurt S., TÜBİTAK Project, Yakıotunun Ksenobiyotik Metabolizması Üzerine Etkilerinin ve İlaç-Diyet Etkileşim Potansiyelinin Proteomik ve Moleküler Yaklaşımlar ile Aydınlatılması, 2009 - 2012
  17. Saraç Ç., Adalı O., Jakubowska Doğru E., TÜBİTAK Project, Genç Sıçanlarda Mekansal Bellekteki Bireysel Varyasyonun Moleküler Temelinin Araştırılması, 2009 - 2012
  18. Saraç Ç., Togan İ. Z., TÜBİTAK Project, İnsan ve Hayvan Sağlığı ve Peynir Verimi ile İlişkisi Olan Süt Proteinlerinden b-Kazein, b-Laktoglobulin ve k-kazein'in Bazı Genotiplerinin DNA'ya Dayalı Yöntemlerle Tanısı, 2005 - 2007

## Scholarships

- Visiting Investigator University of California USA, University, 2010 - 2011  
First Kemali-IBRO Mediterranean School of Neuroscience Italy, University, 2009 - 2009  
Visiting Investigator Royal Institute of Technology Sweden, University, 2004 - 2004

## Published journal articles indexed by SCI, SSCI, and AHCI

1. **Development of Highly Efficient Resistance to Beet Curly Top Iran Virus (Becurtovirus) in Sugar Beet (*B. vulgaris*) via CRISPR/Cas9 System**  
Yıldırım K., Kavas M., Küçük İ. S., Seçgin Z., Saraç Ç.  
International Journal of Molecular Sciences, vol.24, no.7, 2023 (SCI-Expanded)
2. **Cytoprotective effects of low-frequency pulsed electromagnetic field against oxidative stress in glioblastoma cells.**  
Gökçek-Saraç Ç., Şimşek T., Karakurt S.  
General physiology and biophysics, vol.42, no.1, pp.97-106, 2023 (SCI-Expanded)
3. **The Role of Acetylcholine on the Effects of Different Doses of Sulfite in Learning and Memory.**  
DANIŞMAN B., Akçay G., Gökçek-Saraç Ç., Kantar D., Aslan M., DERİN N.  
Neurochemical research, vol.47, no.11, pp.3331-3343, 2022 (SCI-Expanded)
4. **Genome-based identification of beet curly top Iran virus infecting sugar beet in Turkey and investigation of its pathogenicity by agroinfection**  
YILDIRIM K., KAVAS M., Kaya R., SEÇGİN Z., Can C., Sevgen I., SARAÇ Ç., Tahan V.  
JOURNAL OF VIROLOGICAL METHODS, vol.300, 2022 (SCI-Expanded)
5. **Upregulation of p53 by tannic acid treatment suppresses the proliferation of human colorectal carcinoma**  
KARAKURT S., KANDIR S., Gokcek-Sarac C.  
ACTA PHARMACEUTICA, vol.71, no.4, pp.587-602, 2021 (SCI-Expanded)
6. **Possible effects of different doses of 2.1 GHz electromagnetic radiation on learning, and hippocampal levels of cholinergic biomarkers in Wistar rats**  
Gokcek-Sarac C., Akçay G., Karakurt S., ATEŞ K., ÖZEN Ş., DERİN N.  
ELECTROMAGNETIC BIOLOGY AND MEDICINE, vol.40, no.1, pp.179-190, 2021 (SCI-Expanded)
7. **Effects of 2.1 GHz Electromagnetic Radiation on Locomotor Activity, Recognition Memory, and Anxiety-Related Behavior in Rats**

Gokcek-Sarac C.

NEUROPHYSIOLOGY, vol.52, no.4, pp.261-266, 2020 (SCI-Expanded)

8. **Relationship between the hippocampal expression of selected cytochrome P450 isoforms and the animal performance in the hippocampus-dependent learning task**  
Gjota-Ergin S., SARAÇ Ç., ADALI O., Jakubowska-Dogru E.  
NEUROSCIENCE LETTERS, vol.673, pp.104-110, 2018 (SCI-Expanded)
9. **alpha-Actinin Anchors PSD-95 at Postsynaptic Sites**  
Matt L., Kim K., Hergarden A. C., Patriarchi T., Malik Z. A., Park D. K., Chowdhury D., Buonarati O. R., Henderson P. B., SARAÇ Ç., et al.  
NEURON, vol.97, no.5, pp.1094-1118, 2018 (SCI-Expanded)
10. **Effects of acute and chronic exposure to both 900 MHz and 2100 MHz electromagnetic radiation on glutamate receptor signaling pathway.**  
GOKCEK-SARAC C., ER H., MANAS C. K., GOK D., ÖZEN Ş., DERİN N.  
International journal of radiation biology, vol.93, no.9, pp.980-989, 2017 (SCI-Expanded)
11. **Effects of Different Duration Time of Exposure to 2100 MHz Electromagnetic Radiation on Behaviour and Hippocampal Levels of Protein Kinases on Rats**  
SARAÇ Ç., ER H.  
JOURNAL OF NEUROLOGICAL SCIENCES-TURKISH, vol.34, no.4, pp.322-331, 2017 (SCI-Expanded)
12. **Comparison of spatial learning in the partially baited radial-arm maze task between commonly used rat strains: Wistar, Spargue-Dawley, Long-Evans, and outcrossed Wistar/Sprague-Dawley**  
SARAÇ Ç., Wesierska M., Jakubowska-Dogru E.  
LEARNING & BEHAVIOR, vol.43, no.1, pp.83-94, 2015 (SCI-Expanded)
13. **Hippocampal levels of ChAT, PKA, phospho-PKA and phospho-CaMKII alpha but not CaMKII alpha positively correlate with spatial learning skills in rats**  
SARAÇ Ç., ADALI O., Jakubowska-Dogru E.  
NEUROSCIENCE LETTERS, vol.545, pp.112-116, 2013 (SCI-Expanded)
14. **Correlation between hippocampal levels of neural, epithelial and inducible NOS and spatial learning skills in rats**  
SARAÇ Ç., Karakurt S., ADALI O., Jakubowska-Dogru E.  
BEHAVIOURAL BRAIN RESEARCH, vol.235, no.2, pp.326-333, 2012 (SCI-Expanded)
15. **Genetic relationship between Kangal, Akbash and other dog populations**  
Koban E., SARAÇ Ç., Acan S. C., Savolainen P., Togan I.  
DISCRETE APPLIED MATHEMATICS, vol.157, no.10, pp.2335-2340, 2009 (SCI-Expanded)

## Articles Published in Other Journals

1. **Effects of Long-Term Pulsed Electromagnetic Field Exposure on Apoptosis in Neuroblastoma Cell Line**  
Gökçek-Saraç Ç., Çetin E., Karakurt S.  
Süleyman Demirel Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi, vol.18, no.2, pp.88-98, 2023 (Peer-Reviewed Journal)
2. **Yüksek Doz Hidrojen Peroksit ile Muamele Edilen İnsan Nöroblastoma Hücre Hattında Darbeli Elektromanyetik Alan Maruziyetinin Glutasyon Miktarına Etkisi**  
ŞİMŞEK T., KARAKURT S., GÖKÇEK SARAÇ Ç.  
SÜLEYMAN DEMİREL ÜNİVERSİTESİ FEN EDEBİYAT FAKÜLTESİ FEN DERGİSİ = SÜLEYMAN DEMİREL UNIVERSITY FACULTY OF ARTS AND SCIENCE JOURNAL OF SCIENCE, vol.17, no.1, pp.146-154, 2022 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **The molecular basis of individual variation in spatial memory in rats**  
SARAÇ Ç.  
Lambert Academic Publishing-Lap, Saarbrücken, 2015
2. **Investigation of the origin of the Kangal dogs in Turkey**  
SARAÇ Ç.  
Lambert Academic Publishing-Lap, Saarbrücken, 2010

## Refereed Congress / Symposium Publications in Proceedings

1. **Alternative approach to thyroid cancer treatment: investigation of anticarcinogenic effects of hypericum perforatum methanol extract**  
Altunkaya G., KARAKURT S., SARAÇ Ç.  
5th International Mediterranean Congress, Mersin, Turkey, 13 January 2024
2. **CRISPR/Cas9 mediated resistance to Becurtovirus in sugar beet**  
YILDIRIM K., KAVAS M., SEVGEN KÜÇÜK İ., SEÇGİN Z., GÖKÇEK SARAÇ Ç.  
4th PlantEd Conference, Porto, Portugal, 18 - 20 September 2023
3. **Possible effects of cell phone radiation on brain: From behaviour to molecules**  
GÖKÇEK SARAÇ Ç.  
Scholars 2nd Edition International Conference on Optics, Lasers and Photonics, London, Canada, 27 March 2023
4. **Uzun Süreli Darbeli Elektromanyetik Alan Maruziyetinin Nöronal Apoptoz Mekanizmaları Üzerine Olası Etkileri**  
ÇETİN E., KARAKURT S., GÖKÇEK SARAÇ Ç.  
10. Uluslararası Hipokrat Tıp ve Sağlık Bilimleri Kongresi, Turkey, 16 - 17 December 2022, pp.19-20
5. **Investigation of the Expressions of AGTR-1 and AGTR-2 that are Involved in Aldosterone Metabolism in Rat Tissues by Immunochemical Methods**  
GÖKÇEK SARAÇ Ç., KARAKURT S.  
4th Eurasia Biochemical Approaches & Technologies (EBAT) Congress, Antalya, Turkey, 3 - 06 November 2022
6. **Sülfid toksisitesi ile depresyon düzeyi arasındaki ilişkinin davranış deneyleri ile belirlenmesi**  
DERİN N., MUNZUROĞLU M., KENCEBAY MANAS C., GÖKÇEK SARAÇ Ç.  
20. Ulusal Sinirbilim Kongresi, İstanbul, Turkey, 19 - 23 October 2022, pp.156
7. **Aldosteron metabolizmasındaki bazı sitokrom p450 enzimlerinin mRNA seviyelerinin adrenokortikal hücre hattında incelenmesi**  
GÖKÇEK SARAÇ Ç., KARAKURT S.  
8. Uluslararası Erciyes Bilimsel Araştırmalar Kongresi, Kayseri, Turkey, 1 - 02 October 2022, pp.436-437
8. **Post-exposure Effects of PEMF on ROS levels in H2O2-treated Glioblastoma Cell Line**  
Gökçek Saraç Ç., Şimşek T., Karakurt S.  
8th World Congress on Electrical Engineering and Computer Systems and Science (EECSS'22) (9th International Conference on Biomedical Engineering and Systems (ICBES22)), Praha, Czech Republic, 28 - 30 July 2022
9. **Radiofrequency Electromagnetic Radiation Exposure Effects mRNA Levels of Cholinergic Molecules in Rats**  
GÖKÇEK SARAÇ Ç., AKÇAY G., KARAKURT S., ATEŞ K., ÖZEN Ş., DERİN N.  
International Asian Congress on Contemporary Sciences-VI, Van, Turkey, 27 - 29 May 2022, pp.318-321
10. **Impairment effect of 65 V/m dose of 2.1 GHz RF-EMR on recognition memory in Wistar rats**  
GÖKÇEK SARAÇ Ç.  
Tashkent 1st-International Congress on Modern Sciences, Taşkent, Uzbekistan, 10 - 11 May 2022, pp.497-502
11. **Investigation of Possible Effects of Short-Term PEMF Exposure on Glutathione Amount in Human Neuronal Cell Line**

Gökçek Saraç Ç., Şimşek T., Karakurt S.

10. International Drug Chemistry Conference, Antalya, Turkey, 10 - 13 March 2022, pp.114

12. **Farklı dozlardaki sülfitin hipokampal sinaptik plastisite üzerine olan etkisinin incelenmesi**

DANIŞMAN B., AKÇAY G., GÖKÇEK SARAÇ Ç., KANTAR GÜL D., AYDIN ASLAN M., DERİN N.

19. Ulusal Sinirbilim Kongresi, Çevrimiçi, Turkey, 21 - 23 November 2021, pp.57

13. **Pulsed Electromagnetic Field Improves the Antioxidant Response in Human Glioblastoma Cells**

Karakurt S., Şimşek T., Özen Ş., Gökçek Saraç Ç.

9. International Drug Chemistry Conference, Antalya, Turkey, 8 - 11 April 2021

14. **Investigation of the effects of L-Carnitine on age-related learning changes and glutamate pathway**

AKÇAY G., DANIŞMAN B., GÖKÇEK SARAÇ Ç., AYDIN ASLAN M., DERİN N.

FENS Reaginol Meeting 2019, Belgrade, Serbia, 10 - 13 July 2019, pp.617

15. **Sıçanlarda prenatal ve/veya postnatal dönemde sülfite maruziyetine bağlı nörotoksisitede glutamatin rolü**

AKÇAY G., KENCEBAY MANAS C., DANIŞMAN B., DENİZALTI T., GÖKÇEK SARAÇ Ç., AYDIN ASLAN M., DERİN N.

17. Ulusal Sinirbilim Kongresi, Trabzon, Turkey, 4 - 07 April 2019, vol.13, pp.35

16. **Increased Hippocampal Level of Kinases after Long-term Exposure to GSM-2100 Cell Phone Radiation**

Gokcek-Sarac C., ÖZEN Ş., DERİN N.

Photonics and Electromagnetics Research Symposium - Spring (PIERS-Spring), Rome, Italy, 17 - 20 June 2019, pp.1439-1444

17. **Investigation of the Effects of L-Carnitine on Age Related Learning Changes and the Regulation of Glutamate Levels by Behavioral and Molecular Methods**

Saraç Ç., Akçay G., Danışman B., Özkan A., Derin N.

44. Ulusal Fizyoloji Kongresi, Antalya, Turkey, 1 - 04 November 2018, vol.225, pp.23

18. **Effects of sulphite exposure on behaviour and its molecular mechanisms**

DANIŞMAN B., KENCEBAY MANAS C., AKÇAY G., SARAÇ Ç., Denizaltı T., AYDIN ASLAN M., DERİN N.

3rd International Multidisciplinary Studies Congress, Kiev, Ukraine, 5 - 06 October 2018, pp.1-2

19. **Salicylic acid mediated gene regulation and external excretion for mineral toxicity tolerance in poplar**

Yıldırım K., SARAÇ Ç.

7th International congress on molecular biology and biotechnology, Konya, Turkey, 25 - 27 April 2018, pp.1

20. **Investigation of Possible Behavioural and Molecular Effects of Mobile Phone Exposure on Rats**

SARAÇ Ç., ÖZEN Ş., DERİN N.

ICAACEN 2017: 19th International Conference on Applications of Cognitive Engineering and Neuroscience, Prag, Czech Republic, 9 - 10 July 2017, vol.11, pp.1731-1734

21. **Cytotoxic effects of naturally occurring flavonoids on human colon cancer cells**

KARAKURT S., GÖKÇEK SARAÇ Ç., KARAKURT S.

1st International Congress on Medicinal and Aromatic Plants: "Natural and Healthy Life", Konya, Turkey, 9 - 12 May 2017, pp.1024

22. **Effects of 2G Mobile Phone Exposure on Both Behavioural Performance and Levels of Enzyme from NMDA-dependent Pathway**

Gokcek-Sarac C., ÖZEN Ş., DERİN N.

Progress in Electromagnetics Research Symposium - Spring (PIERS), St Petersburg, Russia, 22 - 25 May 2017, pp.1739-1742

23. **Both acute and chronic 2100MHz GSM exposure have different effects on behavioural performance of Wistar rats and the levels of CREB and pCREB in their brain**

GÖKÇEK SARAÇ Ç.

3rd International Conference on Computational and Experimental Science and Engineering (ICCES-2016), Antalya, Turkey, 19 - 24 October 2016, pp.601

24. **Investigation of the hippocampal level of CYP2E1 isoform at different stages of learning in Sprague-Dawley rats**

GÖKÇEK SARAÇ Ç., GJOTA ERGİN S., ADALI O., JAKUBOWSKA DOĞRU E.

3rd International Conference on Computational and Experimental Science and Engineering (ICCES-2016), Antalya, Turkey, 19 - 24 October 2016, pp.629

25. **Hippocampal expression of selected cytochrome P450 isoforms during spatial learning in rats**  
GJOTA ERGİN S., GÖKÇEK SARAÇ Ç., JAKUBOWSKA DOĞRU E.  
10th FENS Forum of European Neuroscience, Copenhagen, Denmark, 2 - 06 July 2016, pp.543
26. **900-2200 MHz RF-EMR maruziyetin protein kinaz A enziminin hipokampustaki seviyesi/aktivitesi üzerine etkilerinin araştırılması**  
DERİN N., SARAÇ Ç., ER H., KENCEBAY MANAS C., ÖZEN Ş.  
14. ULUSAL SİNİRBİLİM KONGRESİ, Ankara, Turkey, 26 - 29 May 2016, pp.279-280
27. **Investigation of the individual variation in spatial memory task among young-adult rats representing four different strains**  
Jakubowska-Doğru E., SARAÇ Ç., Wesierska M.  
9th FENS Forum of European Neuroscience, Milano, Italy, 5 - 09 July 2014, pp.237
28. **. Correlation between individual variation in spatial learning skills among young-adult rats and their hippocampal levels of selected enzymes known as “memory molecules”**  
Jakubowska-Doğru E., SARAÇ Ç., Adalı O.  
45th European Brain and Behavior Society Meeting (EBBS), Munich, Germany, 6 - 09 September 2013, pp.23
29. **Mekansal öğrenme becerisindeki bireysel varyasyon ile ChAT enzim seviyesinin ilişkisi**  
KARAKURT S., SARAÇ Ç., ADALI O., JAKUBOWSKA-DOĞRU E.  
XXV. National Biochemical Meeting, İzmir, Turkey, 3 - 06 September 2013, pp.292
30. **Davranışsal Sinirbilimi: Davranıştan Moleküle**  
SARAÇ Ç., JAKUBOWSKA-DOĞRU E.  
1. ODTÜ Sinirbilim Günleri, Ankara, Turkey, 16 - 17 February 2013, pp.1
31. **Study on molecular correlates of individual variation in spatial memory in young adult rats**  
Jakubowska-Doğru E., SARAÇ Ç., Adalı O.  
Society for Neuroscience (SfN) Neuroscience 2012, New Orleans, United States Of America, 13 - 17 October 2012, pp.66
32. **Investigation of the possible role of CaMKII?, PKA and their phosphorylated forms in spatial learning capacity of Long-Evans rats**  
SARAÇ Ç., Adalı O., Jakubowska-Doğru E.  
8th FENS Forum of European Neuroscience, Barcelona, Spain, 14 - 18 July 2012, pp.677
33. **Study of the relation between the animals’ learning capacity and the hippocampal levels of CaMKII? and pCaMKII? in random population of Long Evans rats**  
SARAÇ Ç., Keçecioglu E., Adalı O., JAKUBOWSKA-DOĞRU E.  
10. Ulusal Sinirbilimleri Kongresi, İstanbul, Turkey, 9 - 12 April 2011, pp.148
34. **In vitro effects of plant phenolic compounds on liver glutathione S-transferase activity**  
KARAKURT S., Sever M., SARAÇ Ç., ADALI O.  
XXII. National Biochemical meeting, Eskişehir, Turkey, 27 - 30 October 2010, pp.83
35. **Investigation of the potential role of nitric oxide synthase (NOS) isoforms in spatial learning in rat hippocampus**  
SARAÇ Ç., KARAKURT S., ADALI O., JAKUBOWSKA-DOĞRU E.  
7th FENS Forum of European Neuroscience, Amsterdam, Netherlands, 3 - 07 July 2010, pp.16
36. **Study of the relation between the spatial learning capacity and the hippocampal expression of different NOS isoforms in the random populations of young-adult laboratory rats**  
SARAÇ Ç., KARAKURT S., ADALI O., JAKUBOWSKA-DOĞRU E.  
9. Ulusal Sinirbilimleri Kongresi, İstanbul, Turkey, 13 - 17 April 2010, pp.165
37. **Correlation between spatial learning and the expression of different Nitric Oxide Synthase (NOS) isoforms in rat hippocampus**  
SARAÇ Ç., KARAKURT S., Koçak Ö., ADALI O., JAKUBOWSKA-DOĞRU E.  
Society for Neuroscience (SfN) Neuroscience 2009, Chicago, United States Of America, 17 - 21 October 2009,

pp.139

38. **An Anatolian Trilogy With Some Implications on Conservation Issues: Arrivals of Nomadic Turks Together with their Sheep and Shepherd Dogs**  
TOGAN İ., Berkman C., KOBAN E., SARAÇ Ç., Dinç H.  
ESF workshop on "Population genetics modelling and habitat fragmentation: separating recent and ancient events for efficient conservation, Oieras, Portugal, 19 - 21 September 2007, pp.1
39. **Identification of genes or gene families involved in resistance to viral disease in native Turkish sheep breeds**  
SARAÇ Ç., Bekpen C., TOGAN İ.  
International Symposium on Health Informatics and Bioinformatics, Antalya, Turkey, 30 April - 02 May 2007, pp.1
40. **Origin of Kangal dogs in Turkey: A Comparative Study**  
SARAÇ Ç., KOBAN E., Açıkan S. C., TOGAN İ.  
Third Joint Meeting of Universities and Research Institutions for Animal Science of the Balkan Countries, Selanik, Greece, 10 - 12 February 2007, pp.10-12
41. **Mitochondrial DNA (mtDNA) sequence analysis of Kangal dogs in Turkey**  
SARAÇ Ç., KOBAN E., Berkman C., TOGAN İ.  
International Symposium on Health Informatics and Bioinformatics, Antalya, Turkey, 10 - 12 November 2005, pp.243

## Academic and Administrative Experience

2023 - Continues	<b>Manager of Research and Application Center</b>	Akdeniz University, Faculty Of Engineering, Department of Biomedical Engineering
2023 - Continues	<b>Erasmus Program Department Coordinator</b>	Akdeniz University, Faculty Of Engineering, Department of Biomedical Engineering
2023 - Continues	<b>Head of Department</b>	Akdeniz University, Faculty Of Engineering, Department of Biomedical Engineering
2023 - Continues	<b>Head of Department</b>	Akdeniz University, Faculty Of Engineering, Department of Biomedical Engineering
2022 - Continues	<b>Bölüm Kalite Komisyonu Üyesi</b>	Akdeniz University, Faculty Of Engineering, Department of Biomedical Engineering
2021 - Continues	<b>Fakülte Kurulu Üyesi</b>	Akdeniz University, Faculty Of Engineering, Department of Biomedical Engineering
2017 - Continues	<b>Board Member</b>	Akdeniz University, Engelli Öğrenci Birimi
2016 - 2023	<b>Deputy Head of Department</b>	Akdeniz University, Faculty Of Engineering, Department of Biomedical Engineering
2017 - 2020	<b>Board Member</b>	Akdeniz University, Akışmer Ttm

## Courses

Nöromühendislik, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Biyomedikal Mühendisler için Anatomi ve Fizyoloji, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021,



2019 - 2020, 2018 - 2019, 2017 - 2018

Introduction to Medical Imaging, Undergraduate, 2022 - 2023, 2021 - 2022

Bilimsel Araştırma Teknikleri ve Etik I , Postgraduate, 2019 - 2020

Biyomedikal Teknolojileri Kullanımı, Associate Degree, 2016 - 2017

Biyolojik Yaşlanma Teorileri Dersi -I, Undergraduate, 2016 - 2017

## Advising Theses

Saraç Ç., Üncü Y. A., Derin Öğrenme Uygulaması Destekli Pekıştirmeli Öğrenme Algoritması İle Beyin Kanseri Tanı Ve Sınıflandırılmasında Etkili Bir Arayüz Oluşturulması , Postgraduate, S.Arıkan(Student), Continues

Saraç Ç., Gliblastoma hücrelerinde darbeli elektromanyetik alan maruziyeti ve resveratrolün apoptotik yolda sinerjik etkisinin incelenmesi, Postgraduate, A.Doğan(Student), Continues

Karakurt S., Saraç Ç., Hypericum perforatum ekstraktının insan tiroid kanserine karşı antikanserojenik etkilerinin araştırılması, Postgraduate, G.Altunkaya(Student), 2024

Adalı O., Saraç Ç., Investigation of transcriptomic, proteomic, and enzymatic activity profile of liver antioxidant enzymes (CAT, SOD, GPx, Trx in multiple sclerosis mice model, Doctorate, S.GJOTA(Student), 2023

Saraç Ç., Darbeli elektromanyetik alana kısa ve uzun süreli maruziyetin oleik asit ile muamele edilen beyin hücrelerinde nöronal apoptoz mekanizmaları üzerine moleküler etkileri, Postgraduate, E.ÇETİN(Student), 2023

Saraç Ç., Darbeli elektromanyetik alan uygulamasının (PEMA) beyin hücrelerinde hidrojen peroksit (H<sub>2</sub>O<sub>2</sub>) ile indüklenmiş oksidatif stres üzerindeki etkisi, Postgraduate, T.ŞİMŞEK(Student), 2021

Saraç Ç., Adalı O., Hippocampal expression of selected cytochrome P450 isoforms during spatial learning in rats., Postgraduate, S.Gjota(Student), 2016

## Activities in Scientific Journals

Akdeniz Mühendislik Dergisi, Article Editor, 2023 - Continues

## Memberships / Tasks in Scientific Organizations

Türkiye Beyin Araştırmaları ve Sinirbilimleri Derneği, Member, 2008 - Continues

Federation of European Neuroscience, Member, 2008 - Continues

American Society for Neuroscience, Member, 2008 - Continues

Computational Biology and Medicine Group, Member, 2005 - Continues

## Scientific Refereeing

Biomedical and Environmental Sciences, SCI Journal, January 2020

Heliyon, SCI Journal, January 2020

Electromagnetic Biology and Medicine, SCI Journal, January 2019

Bioelectromagnetics, SCI Journal, January 2017

## Metrics

Publication: 60

Citation (WoS): 113

Citation (Scopus): 128

H-Index (WoS): 6

H-Index (Scopus): 6

### **Research Areas**

Biomedical Engineering, Clinical Engineering, Electromagnetic in Biology and Medicine, Life Sciences, Biochemistry, Molecular Biochemistry, Bioinformatics, Molecular Biology and Genetics, Animal Molecular Genetics, Neurobiology, Health Sciences, Fundamental Medical Sciences, Neurophysiology, Natural Sciences

### **Non Academic Experience**

University of California, Davis (UCDavis) Department of Pharmacology, California, United States