

Asst. Prof. GÖKHAN ÜNAL

Personal Information

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Education Information

Post Doctorate, The University of Manchester, Division of Pharmacy and Optometry, England 2020 - 2020

Doctorate, Erciyes Üniversitesi, Sağlık Bilimleri Enstitüsü, Farmakoloji, Turkey 2013 - 2017

Undergraduate, Erciyes Üniversitesi, Eczacılık Fakültesi, Turkey 2007 - 2012

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Sıçanlarda MK-801 ile Oluşturulmuş Şizofreni Modelinde Nikotinik Alfa-7 Reseptörlerinin Şizofreninin Pozitif, Negatif ve Kognitif Semptomları Üzerine Olası Etkilerinin İncelenmesi, Marmara Üniversitesi, Sağlık Bilimleri Enstitüsü, Farmakoloji, 2017

Research Areas

Medicine, Health Sciences, Internal Medicine Sciences, Psychiatry, Pharmacology and Therapeutics, Professional Sciences, Pharmacology

Academic Titles / Tasks

Assistant Professor, Erciyes University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri , 2018 - Continues

Researcher, The University of Manchester, Division of Pharmacy and Optometry, 2020 - 2020

Research Assistant PhD, Erciyes University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri , 2018 - 2018

Research Assistant, Marmara Üniversitesi, Sağlık Bilimleri Enstitüsü, Farmakoloji, 2013 - 2017

Academic and Administrative Experience

DEKAM Vice Manager, Erciyes University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri , 2019 - Continues

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **alpha 7 nicotinic receptor agonist and positive allosteric modulators differently improved schizophrenia-like cognitive deficits in male rats**
 ÜNAL G., ŞİRVANCI S., ARICIOĞLU F.
 BEHAVIOURAL BRAIN RESEARCH, vol.397, 2021 (Journal Indexed in SCI)
- II. **Alpha 7 nicotinic receptor agonist and positive allosteric modulators improved social and molecular deficits of MK-801 model of schizophrenia in rats**
 Ünal G., Bekci H., Cumaoglu A., Yerer M. B. , Arıcıoğlu F.
 PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR, vol.193, 2020 (Journal Indexed in SCI)
- III. **Immunopharmacological management of COVID-19: Potential therapeutic role of valproic acid.**
 Unal G., Turan B., Balcioglu Y.
 Medical hypotheses, vol.143, pp.109891, 2020 (Journal Indexed in SCI)
- IV. **Famotidine has a neuroprotective effect on MK-801 induced toxicity via the Akt/GSK-3 β / β -catenin signaling pathway in the SH-SY5Y cell line.**
 Unal G., Dokumaci A., Ozkartal C., Yerer M. B. , Arıcıoğlu F.
 Chemico-biological interactions, vol.314, pp.108823, 2019 (Journal Indexed in SCI Expanded)
- V. **Lichen Based Synthesis of Zinc Oxide Nanoparticles and Evaluation of its Neurotoxic Effects on Human Neuroblastoma Cells**
 Koca F. D. , Ünal G., Halıcı M. G.
 JOURNAL OF NANO RESEARCH, vol.59, pp.15-24, 2019 (Journal Indexed in SCI)
- VI. **SYNTHESIS AND BIOLOGICAL EVALUATION OF SOME NEW HYDRAZONE DERIVATIVES BEARING PYRIMIDINE RING AS ANALGESIC AND ANTI-INFLAMMATORY AGENTS**
 Akdag K., ÜNAL G., TOK F., ARICIOĞLU F., Temel H. E. , KAYMAKÇIOĞLU B.
 ACTA POLONIAE PHARMACEUTICA, vol.75, no.5, pp.1147-1159, 2018 (Journal Indexed in SCI)
- VII. **Agmatine-attenuated cognitive and social deficits in subchronic MK-801 model of schizophrenia in rats**
 Unal G., Ates A., Arıcıoğlu F.
 PSYCHIATRY AND CLINICAL PSYCHOPHARMACOLOGY, vol.28, no.3, pp.245-253, 2018 (Journal Indexed in SCI)
- VIII. **A-582941, cholinergic alpha 7 nicotinic receptor agonist, improved cognitive and negative symptoms of the sub-chronic MK-801 model of schizophrenia in rats**
 Unal G., Arıcıoğlu F.
 PSYCHIATRY AND CLINICAL PSYCHOPHARMACOLOGY, vol.28, no.1, pp.4-13, 2018 (Journal Indexed in SCI)
- IX. **Neuroinflammation in Schizophrenia: A Critical Review and The Future**
 Arıcıoğlu F., Ozkartal C. S. , Unal G., Dursun S., CETİN M., Mueller N.
 KLINIK PSIKOFARMAKOLOJİ BULTENİ-BULLETIN OF CLINICAL PSYCHOPHARMACOLOGY, vol.26, no.4, pp.429-437, 2016 (Journal Indexed in SCI)
- X. **Regulation of GSK-3 Activity as A Shared Mechanism in Psychiatric Disorders**
 Sahin C., Unal G., Arıcıoğlu F.
 KLINIK PSIKOFARMAKOLOJİ BULTENİ-BULLETIN OF CLINICAL PSYCHOPHARMACOLOGY, vol.24, no.1, pp.97-108, 2014 (Journal Indexed in SCI)
- XI. **pK(a) Constant of Varenicline**
 ÜNAL G., Yeloglu I., Anılanmert B., NARİN I.
 JOURNAL OF CHEMICAL AND ENGINEERING DATA, vol.57, no.1, pp.14-17, 2012 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Vortioxetine improved social and cognitive deficits in acute ketamine model of schizophrenia in rats**
 Ünal G., Taşkıran M.
 Journal of Research in Pharmacy, vol.24, no.8, pp.1-8, 2020 (Journal Indexed in ESCI)
- II. **Neuroprotective effects of thymoquinone against ketamine -and MK-801-induced neurotoxicity in SH-SY5Y cells: From the perspective of glutamatergic dysfunction in schizophrenia**

- ÜNAL G., Erdogan B.
CLINICAL AND EXPERIMENTAL HEALTH SCIENCES, vol.10, no.2, pp.178-182, 2020 (Journal Indexed in ESCI)
- III. **Famotidine Improved Schizophrenia-Like Behaviors in Acute Ketamine Model of Schizophrenia in Rats**
Ünal G., Aricioğlu F.
Psychiatry and Behavioral Sciences, vol.10, no.2, pp.45-54, 2020 (Journal Indexed in ESCI)
- IV. **Comparison of behavioural and molecular effects of two different schizophrenia models induced by subchronic MK-801 administration in rats**
ÜNAL G., Aricioğlu F.
MARMARA PHARMACEUTICAL JOURNAL, vol.22, no.2, pp.199-208, 2018 (Journal Indexed in ESCI)
- V. **Deneysel Şizofreni Modelleri: Psikofarmakolojik Bakış**
ÜNAL G., ARICIOĞLU F.
Türkiye Klinikleri Laboratuvar Hayvanları Dergisi, vol.1, pp.105-114, 2017 (Other Refereed National Journals)
- VI. **POSSIBLE PROTECTIVE EFFECTS OF AGMATINE AND FAMOTIDINE ON MK-801-INDUCED CYTOTOXICITY IN SHSY 5YCELL LINE**
AYCAN M. B. , DOKUMACI A. H. , ÜNAL G. , Şahin C. , ARICIOĞLU F.
Journal of Cellular Neuroscience and oxidative stress, 2017 (Refereed Journals of Other Institutions)
- VII. **The involvement of Akt and GSK 3 Two pathways two pathology**
ŞAHİN C., ÜNAL G., ARICIOĞLU F.
Journal of Marmara University Institute of Health Sciences, pp.1, 2014 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **ACUTE and CHRONIC NMDA RECEPTOR ANTAGONIST MODELS of SCHIZOPHRENIA CAUSED DIFFERENT DISRUPTIONS on PREPULSE INHIBITION of ACUSTIC STARTLE RESPONSE TEST in RATS**
ÜNAL G.
5. Uluslararası Gevher Nesibe Sağlık Bilimleri Kongresi, 24 April - 25 May 2020
- II. **SIÇANLARDA SUBKRONİK MK-801 UYGULAMASININKORKU KOŞULLAMA UZERİNE ETKİLERİNİNİNCELENMESİ**
ÜNAL G.
1.UluslararasıSağlık Bilimleri ve İnovasyon Kongresi, 10 - 12 April 2020
- III. **Nigella sativa oil improved cognitive symptoms in subchronic MK-801 model of schizophrenia in rats**
ÜNAL G., Zortul H., ARICIOĞLU F.
11th International Congress on Psychopharmacology 7th International Symposium on Child and Adolescent Psychopharmacology, 18 - 21 April 2019
- IV. **A comparison of two schizophrenia models induced by MK-801: Possible involvement of phosphodiesterase 4A and glycogen synthase kinase 3 beta**
Yerer M. B. , ÜNAL G., Bekci H., CUMAOĞLU A., Aricioğlu F.
31st Congress of the European-College-of-Neuropsychopharmacology (ECNP), Barcelona, Spain, 6 - 09 October 2018, vol.29
- V. **Identification of the possible downstream path-ways related to alpha7 nicotinic acetylcholine receptor in MK-801 induced schizophrenia model in rats**
CUMAOĞLU A., ÜNAL G., Bekci H., Yerer M. B. , ARICIOĞLU F.
31st Congress of the European-College-of-Neuropsychopharmacology (ECNP), Barcelona, Spain, 6 - 09 October 2018, vol.29
- VI. **Effects of agmatine on Akt/GSK-3beta/betacatenin signaling pathway in SH-SY5Y cell culture: Relevance to schizophrenia**
ÜNAL G., ARICIOĞLU F., Dokumaci A. H. , Yerer-Aycan M. B. , Ozkartal-Sahin C.
ECNP Workshop on Early Career Scientists in Europe, Nice, France, 7 - 10 March 2019, vol.29
- VII. **Agmatine attenuated sensorimotor gating deficit in schizophrenia model in rats: Combination of**

neonatal MK-801 and isolation rearing

ÜNAL G., ARICIOĞLU F., Zortul H., ÖZBEYLİ D.

31th Congress European College of Neuropsychopharmacology, 6 - 09 October 2018

- VIII. **Alpha-7 nicotinic acetylcholine receptor agonist and positive allosteric modulators improved receptor deficits induced by MK-801 model of schizophrenia in rats**
ÜNAL G., ARICIOĞLU F.
ISBS Translational Biological Psychiatry Symposium, 23 May 2018
- IX. **Alpha-7 nicotinic acetylcholine receptor positive allosteric modulators improved GABAergic deficits of schizophrenia in subchronic MK-801 model of rats**
ÜNAL G., ARICIOĞLU F.
10th International Congress on Psychopharmacology and 6th International Symposium on Child and Adolescent Psychopharmacology, 25 - 29 April 2018
- X. **Nigella sativa extract improved sensorimotor gating deficit on acute ketamine model of schizophrenia in rats**
ÜNAL G., KELEŞ R. M., TAŞKIN T., ARICIOĞLU F.
30th Congress European College of Neuropsychopharmacology (ECNP), 2 - 05 September 2017
- XI. **Nicotinic alpha7 receptor agonist and modulators improved social but not sensorimotor deficits on subchronic MK-801 model of schizophrenia in rats.**
ÜNAL G., Zortul H., YAVUZ A. N., ARICIOĞLU F.
30th Congress European College of Neuropsychopharmacology (ECNP), 2 - 05 September 2017
- XII. **Effect of nicotinic alpha 7 receptor agonist and positive allosteric modulators on cognitive symptoms in subchronic MK-801 model of schizophrenia in rats**
ÜNAL G., ARICIOĞLU F., YAVUZ A. N., Zortul H.
British Association of Psychopharmacology (BAP) Summer Meeting, 23 - 26 July 2017
- XIII. **Cholinergic alpha 7 nicotinic receptor agonism improved cognitive and negative symptoms of MK-801-induced schizophrenia in rats.**
ÜNAL G., ARICIOĞLU F., YAVUZ A. N.
9th International Congress on Psychopharmacology and 5th International Symposium on Child and Adolescent Psychopharmacology, 26 - 30 April 2017
- XIV. **Olanzapine Reversed MK-801 Induced Cell Damage via Akt/GSK-3 β/β -Catenine Signaling Pathway in SH SY5Y Cell Culture**
ÜNAL G., DOKUMACI A. H., AYCAN M. B., ÖZKARTAL C., ARICIOĞLU F.
9th International Congress on Psychopharmacology and 5th International Symposium on Child and Adolescent Psychopharmacology, 26 - 30 April 2017, vol.27, pp.57
- XV. **Famotidine: Is it a potential new candidate for the treatment of schizophrenia by inhibiting GSK-3 beta?**
Unal G., DOKUMACI A. H., Hazar-Yavuz A. N., AYCAN M. B., Sahin C., Keles R., Aricioglu F.
29th Congress of the European-College-of-Neuropsychopharmacology (ECNP), Vienna, Austria, 17 - 20 September 2016, vol.26
- XVI. **Antidepressant like effect of hydro alcoholic extract of nigella sativa in tail suspension test in mice**
YAVUZ A. N., KELEŞ R. M., ÜNAL G., TAŞKIN T., ARICIOĞLU F.
29th Congress European College of Neuropsychopharmacology (ECNP), Vienna, Austria, 17 - 20 September 2016
- XVII. **Famotidine Is it a potential new candidate for the treatment of schizophrenia by inhibiting GSK 3beta**
ÜNAL G., Dokumacı A. H., Hazar Yavuz A. N., AYCAN M. B., Şahin C., Keleş R., ARICIOĞLU F.
29th ECNP congress, 17 - 20 September 2016
- XVIII. **Famotidine reverses social withdrawal but not fear conditioning deficits induced by acute ketamine model in rats**
ARICIOĞLU F., ÜNAL G., YAVUZ A. N., ÖZKARTAL C., KELEŞ R. M.
7 th European Congress of Pharmacology (EPHAR2016), İstanbul, Turkey, 26 - 30 July 2016
- XIX. **The combination of sub effective doses of agmatine and ketamine reduces obsessive compulsive like behavior of mice in marble burying test**

KELEŞ R. M. , YAVUZ A. N. , ÖZKARTAL C., ÜNAL G., ARICIOĞLU F.

30th World International College of Neuropsychopharmacology (CINP) Congress, Seoul, South Korea, 3 - 05 July 2016, vol.19, pp.24-25

- XX. **Possible protective effects of agmatine and famotidine on MK 801 induced cytotoxicity in SHSY 5Y cell line**
AYCAN M. B. , Dokumacı A. H. , ÜNAL G., ÖZKARTAL C., ARICIOĞLU F.
6th World Congress of Oxidative Stress, Calcium Signaling and TRP Channels, Isparta, Turkey, 24 - 27 May 2016
- XXI. **Possible protective effects of agmatine and famotidine on MK 801 induced cytotoxicity in SHSY 5Y cell line 6th World congress of Oxidative stress calcium signaling and TRP channels**
AYCAN M. B. , DOKUMACI A. H. , ÜNAL G., Şahin C., ARICIOĞLU F.
6th World congress of Oxidative stress, calcium signaling and TRP channels., 24 - 27 May 2016
- XXII. **Possible neuroprotective effects of agmatine via GSK3 beta protein expression in SHSY5Y cell line**
DOKUMACI A. H. , ÜNAL G., AYCAN M. B. , Şahin C., ARICIOĞLU F.
8. Uluslararası Psikofarmakoloji Kongresi, 20 - 24 April 2016
- XXIII. **Famotidine reverses learning and memory deficits induced by acute ketamine model of schizophrenia in novel object recognition test in rats**
YAVUZ A. N. , ÜNAL G., ÖZKARTAL C., KELEŞ R. M. , KRAUS M., ARICIOĞLU F.
8th International Congress on Psychopharmacology and 4th International Symposium on Child and Adolescent Psychopharmacology, Antalya, Turkey, 20 - 24 April 2016
- XXIV. **Agmatine potentiates the antidepressant effect of ketamine in forced swimming test of rats**
KELEŞ R. M. , YAVUZ A. N. , ÖZKARTAL C., ÜNAL G., ARICIOĞLU F.
8th International Congress on Psychopharmacology and 4th International Symposium on Child and Adolescent Psychopharmacology, Antalya, Turkey, 20 - 24 April 2016
- XXV. **Agmatine treatment prevents MK 801 induced neurodegeneration in cell culture**
ÜNAL G., DOKUMACI A. H. , AYCAN M. B. , ÖZKARTAL C., ARICIOĞLU F.
8th International Congress on Psychopharmacology and 4th International Symposium on Child and Adolescent Psychopharmacology, Antalya, Turkey, 20 - 24 April 2016
- XXVI. **Possible neuroprotective effects of agmatine via GSK3 protein expression in SH SY5Y cell line**
DOKUMACI A. H. , ÜNAL G., AYCAN M. B. , ÖZKARTAL C., ARICIOĞLU F.
8th International Congress on Psychopharmacology and 4th International Symposium on Child and Adolescent Psychopharmacology, Antalya, Turkey, 20 - 24 April 2016
- XXVII. **Agmatine attenuates cecal ligation induced sickness behavior in rats**
ARICIOĞLU F., ŞAHİN C., ÜNAL G., UTKAN T.
4th World Psychiatric Association International Congress, 18 - 22 November 2015, pp.446
- XXVIII. **Bioactive beta carbolines harman and norharman attenuate oxidative damage in sub chronic stress model in rats**
ARICIOĞLU F., ŞAHİN C., ÜNAL G., ARKAN G.
4th World Psychiatric Association International Congress, 18 - 22 November 2015
- XXIX. **The effect of acute ketamine administration on NLRP3 inflammasome activation in a sub chronic stress model of rats**
ÜNAL G., TERZİOĞLU G., ŞAHİN C., YANIKKAYA DEMİREL G., ARICIOĞLU F.
28th European Congress of Neuropsychopharmacology (ECNP), Amsterdam, Netherlands, 29 August - 01 September 2015, vol.25, pp.226-227
- XXX. **Acute administration of ketamine inhibited stress induced pro inflammatory cytokines in hippocampus of rats**
ÜNAL G., Terzioğlu G., ŞAHİN C., Yanikkaya Demirel G., ARICIOĞLU F.
7th International Congress on Psychopharmacology and 3rd International Symposium on Child and Adolescent Psychopharmacology, Antalya, Turkey, 15 - 19 April 2015
- XXXI. **Synthesis and antinociceptive activities of some hydrazide hydrazones of ethyl 4-chloro-2-methylthio-5-pyrimidine carboxilate**
Akdağ K., KAYMAKÇIOĞLU B., ÖZKARTAL C., ÜNAL G., ARICIOĞLU F.

Joining Forces in Pharmaceutical Analysis and Medicinal Chemistry, 25 - 26 August 2014

XXXII. Investigation of Cytotoxic Effects of Pelargonium endlicherianum Extracts and Related Phenolic Compounds Esculetin and Scopoletin

DOKUMACI A. H. , ÜNAL G., ŞEKER KARATOPRAK G., AYCAN M. B.

2nd Anticancer Agent Congress, Bodrum, Turkey, 23 - 27 April 2014

XXXIII. Investigation Of Cytotoxic Effects Of Pelargonium Endlicherianum Extracts And Related Phenolic Compounds: Esculetin And Scopoletin.

DOKUMACI A. H. , ÜNAL G., ŞEKER KARATOPRAK G., AYCAN M. B.

2nd Anticancer Agent Congress, Muğla, Turkey, 23 - 25 April 2014, pp.100

XXXIV. Acute P2X7 receptor blockade by Brilliant Blue G (BBG) does not result in antidepressant-like activity in rats

ÖZKARTAL C., GÜDEN D. S. , ÜNAL G., ARICIOĞLU F.

6th International Congress on Psychopharmacology and 2nd Symposium on Child and Adolescent

Psychopharmacology, 16 - 20 April 2014

Supported Projects

ÜNAL G., ARICIOĞLU F., AYCAN M. B. , Project Supported by Higher Education Institutions, SH-SY5Y hücrelerinde MK-801 ile indüklenen hücre hasarına karşı agmatinin koruyucu etkisinin araştırılması, 2018 - 2019

AYCAN M. B. , ARICIOĞLU F., ÜNAL G., Project Supported by Higher Education Institutions, SIÇANLARDA MK801 İLE OLUŞTURULMUŞ ŞİZOFRENİ MODELİNDE NİKOTİNİK ALFA7 RESEPTÖRLERİNİN ŞİZOFRENİNİN POZİTİF, NEGATİF VE KOGNİTİF SEMPTOMLARI ÜZERİNE OLASI ETKİLERİNİN İNCELENMESİ, 2018 - 2018

Activities in Scientific Journals

PSYCHIATRY AND CLINICAL PSYCHOPHARMACOLOGY, Committee Member, 2020 - Continues

Mobility Activity

Other, Post Doc, The University of Manchester, England, 2020 - 2020

Citations

Total Citations (WOS):31

h-index (WOS):3

Scholarships

2219 - Yurtdışı Doktora Sonrası Araştırma Burs Programı, TUBITAK, 2021 - 2022