

## Assoc. Prof. KEVSER BİBEROĞLU

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-9285-0819

Publons / Web Of Science ResearcherID: I-8430-2013

ScopusID: 6603756596

Yoksis Researcher ID: 102887

### Education Information

Doctorate, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, Turkey 2010 - 2014

Postgraduate, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, Turkey 2007 - 2010

Undergraduate, Hacettepe University, Eczacılık Fakültesi, Turkey 2002 - 2006

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Fetal sığır serum asetilkolinesterazının tetramerik yapısını organize eden poliprolin peptidlerin kütle spektrometre ile analizi, Hacettepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Biyokimya (Dr), 2014

Postgraduate, Bölge yönelimli mutagenез yaklaşımı ile insan bütrilkolinesterazında yapı-aktivite ilişkilerinin incelenmesi, Hacettepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Biyokimya (YI) (Tezli), 2010

### Research Areas

Basic Pharmaceutics Sciences, Health Sciences, Pharmacology and Therapeutics, Biochemistry

### Academic Titles / Tasks

Assistant Professor, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2018 - Continues  
Assistant Professor, The University of Nebraska, The Eppley Institute, Department of Biochemistry and Molecular Biology Environmental Health and Toxicology , 2019 - 2019

Assistant Professor, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2016 - 2018

Research Assistant, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2007 - 2016

Research Assistant, The University of Nebraska, The Eppley Institute, Department of Biochemistry and Molecular Biology

## Courses

Biyokimya III Laboratuvarı, Undergraduate, 2017 - 2018, 2016 - 2017

Biyokimya I, Undergraduate, 2017 - 2018, 2016 - 2017

Biyokimya III, Undergraduate, 2017 - 2018

Vitaminer ve Koenzimler, Undergraduate, 2017 - 2018

Biyokimya, Associate Degree, 2016 - 2017

Biyokimya II, Undergraduate, 2016 - 2017

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

- I. **Toluidine blue O attenuates tau phosphorylation in N2a-APP<sup>Swe</sup> cells**  
Onder S, BİBEROĞLU K., Yuksel M., TACAL Ö.  
Chemico-Biological Interactions, vol.366, 2022 (SCI-Expanded)
- II. **Chlorpyrifos oxon crosslinking of amyloid beta 42 peptides is a new route for generation of self-aggregating amyloidogenic oligomers that promote Alzheimer's disease**  
Onder S, BİBEROĞLU K., TACAL Ö., Schopfer L. M.  
CHEMICO-BIOLOGICAL INTERACTIONS, vol.363, 2022 (SCI-Expanded)
- III. **Effects of toluidine blue O and methylene blue on growth and viability of pancreatic cancer cells**  
BİBEROĞLU K., YÜKSEL M., ÖNDER S., TACAL Ö.  
DRUG DEVELOPMENT RESEARCH, vol.83, no.4, pp.900-909, 2022 (SCI-Expanded)
- IV. **Characteristic fragment ions associated with dansyl cadaverine and biotin cadaverine adducts on glutamine**  
BİBEROĞLU K., Schopfer L. M., TACAL Ö., Lockridge O.  
ANALYTICAL BIOCHEMISTRY, vol.600, 2020 (SCI-Expanded)
- V. **Chlorpyrifos Oxon-Induced Isopeptide Bond Formation in Human Butyrylcholinesterase**  
BİBEROĞLU K., TACAL Ö., Schopfer L. M., Lockridge O.  
MOLECULES, vol.25, no.3, 2020 (SCI-Expanded)
- VI. **The kinetics of inhibition of human acetylcholinesterase and butyrylcholinesterase by methylene violet 3RAX**  
Onder S, Biberoglu K., Tacal Ö.  
CHEMICO-BIOLOGICAL INTERACTIONS, vol.314, 2019 (SCI-Expanded)
- VII. **Toluidine blue O modifies hippocampal amyloid pathology in a transgenic mouse model of Alzheimer's disease**  
YÜKSEL M., BİBEROĞLU K., ÖNDER S., Akbulut K. G., TACAL Ö.  
BIOCHIMIE, vol.146, pp.105-112, 2018 (SCI-Expanded)
- VIII. **Effects of phenothiazine-structured compounds on APP processing in Alzheimer's disease cellular model**  
YÜKSEL M., BİBEROĞLU K., ÖNDER S., Akbulut K. G., TACAL Ö.  
BIOCHIMIE, vol.138, pp.82-89, 2017 (SCI-Expanded)
- IX. **Azure B reduces extracellular amyloid-beta levels in PS70 cells**  
BİBEROĞLU K., YÜKSEL TEK M., ÖNDER S., TACAL Ö.  
FEBS JOURNAL, vol.283, pp.266, 2016 (SCI-Expanded)
- X. **Toluidine blue O is a potent inhibitor of human cholinesterases**  
BİBEROĞLU K., TEK M. Y., GHASEMI S., TACAL Ö.  
ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol.604, pp.57-62, 2016 (SCI-Expanded)
- XI. **Determination of binding points of methylene blue and cationic phenoxazine dyes on human**

### **butyrylcholinesterase**

Sezgin Z., BİBEROĞLU K., Chupakhin V., Makhaeva G. F., TACAL Ö.

ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol.532, no.1, pp.32-38, 2013 (SCI-Expanded)

- XII. **Polyproline tetramer organizing peptides in fetal bovine serum acetylcholinesterase**  
BİBEROĞLU K., Schopfer L. M., Saxena A., TACAL Ö., Lockridge O.  
BIOCHIMICA ET BIOPHYSICA ACTA-PROTEINS AND PROTEOMICS, vol.1834, no.4, pp.745-753, 2013 (SCI-Expanded)
- XIII. **The proline-rich tetramerization peptides in equine serum butyrylcholinesterase**  
BİBEROĞLU K., Schopfer L. M., TACAL Ö., Lockridge O.  
FEBS JOURNAL, vol.279, no.20, pp.3844-3858, 2012 (SCI-Expanded)
- XIV. **The role of Phe329 in binding of cationic triarylmethane dyes to human butyrylcholinesterase**  
BİBEROĞLU K., TACAL Ö., Akbulut H.  
ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol.511, pp.64-68, 2011 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **Kinetics of human butyrylcholinesterase inhibition by 1,9-dimethyl- methylene blue**  
Biberoğlu K.  
Journal of the Turkish Chemical Society Section A: Chemistry, vol.8, no.2, pp.335-442, 2021 (Scopus)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **Toluidine blue O decreases tau phosphorylation at Thr181 and Ser202/Thr 205 in N2a mouse neuroblastoma cells stably expressing the human Swedish mutant APP695**  
Önder S., Biberoğlu K., Yüksel M., Tacal Ö.  
13th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 22 - 25 June 2021, pp.1-2
- II. **The effects of phenothiazine dyes on GAG-modified APLP2 and  $\beta$ -secretase 1 levels in Hs766t cells''**  
BİBEROĞLU K., YÜKSEL M., ÖNDER S., TACAL Ö.  
TBD Uluslararası Biyokimya Kongresi 2018 // 29. Ulusal Biyokimya Kongresi, 26 - 30 October 2018
- III. **Inhibition of human acetylcholinesterase and butyrylcholinesterase by methylene violet 3RAX**  
ÖNDER S., BİBEROĞLU K., TACAL Ö.  
13th International Meeting on Cholinesterases, 9 - 14 September 2018
- IV. **Toluidine blue O reduces APLP2 and APLP2 CTF levels in Hs766T cells**  
BİBEROĞLU K., YÜKSEL M., ÖNDER S., TACAL Ö.  
43rd FEBS Congress, 7 - 12 July 2018
- V. **The Inhibitory effects of phenothiazine dyes on B-secretase**  
BİBEROĞLU K., YÜKSEL M., ÖNDER S., TACAL Ö.  
12th International Symposium on Pharmaceutical Sciences, 26 - 29 June 2018
- VI. **Hacettepe Üniversitesi Eczacılık Fakültesi'nin Akreditasyon Süreci Açısından 2016 ve 2017 Yılı Değerlendirmesi**  
ERDOĞAR N., DOĞAN A., BİBEROĞLU K., ULUTAŞ DENİZ E., EROĞLU İ., KAZKAYASI İ., DÜZENLİ Ö. F., ARITULUK Z. C., SARI S., GENÇ Y., et al.  
II. Ulusal Eczacılık Eğitimi ve Akreditasyon Kongresi, Turkey, 10 - 11 May 2018
- VII. **Hacettepe Üniversitesi Eczacılık Fakültesi'nin Akreditasyon Sonrasında Standartları Karşılama Açısından Son Üç Yıldaki Mevcut Durumu**  
ERDOĞAR N., DOĞAN A., BİBEROĞLU K., ULUTAŞ DENİZ E., EROĞLU İ., KAZKAYASI İ., DÜZENLİ Ö. F., ARITULUK Z. C., SARI S., GENÇ Y., et al.  
II. Ulusal Eczacılık Eğitimi ve Akreditasyon Kongresi, Turkey, 10 - 11 May 2018
- VIII. **Toluidine blue O, but not thionine, alters APP processing in 3xTg-AD mice**

YÜKSEL M., BİBEROĞLU K., ÖNDER S., AKBULUT K. G., TACAL Ö.

42nd FEBS CONGRESS, 10 - 14 September 2017, vol.284

- IX. Effect of toluidine blue O on tau pathology in an Alzheimer's disease animal model**  
YÜKSEL M., BİBEROĞLU K., ÖNDER S., AKBULUT K. G., TACAL Ö.  
FEBS Advanced Lecture Course ALC17-012 Nuclear Receptors and Epigenomic Mechanisms in Human Disease and Aging, Spetses, Greece, 26 August - 01 September 2017
- X. Azure B reduces extracellular amyloid-beta levels in PS70 cells**  
BİBEROĞLU K., Tek M. Y., ÖNDER S. Ç., TACAL Ö.  
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.266
- XI. The extracellular A beta levels are reduced by the cholinesterase inhibitor toluidine blue O in an Alzheimer's disease-like cellular model**  
Tek M. Y., BİBEROĞLU K., ÖNDER S. Ç., Akbulut K. G., TACAL Ö.  
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.321
- XII. The effect of thionine on amyloid b peptide levels in PS70 cells**  
YÜKSEL TEK M., BİBEROĞLU K., SEDA O., AKBULUT K. G., Tacal Ö.  
12th International Meeting on Cholinesterases-Sixth International Conference on Paraoxonases, Elche, Spain, 27 September - 02 October 2015
- XIII. The effect of toluidine blue O on amyloid-beta peptide levels in human neuroblastoma cells**  
Tek M. Y., BİBEROĞLU K., ÖNDER S. Ç., Akbulut K. G., TACAL Ö.  
40th Congress of the Federation-of-European-Biochemical-Societies (FEBS) - The Biochemical Basis of Life, Berlin, Germany, 4 - 09 July 2015, vol.282, pp.177
- XIV. Toluidine Blue O is a potent inhibitor of human cholinesterases**  
BİBEROĞLU K., Ghasemi S. T., TACAL Ö.  
FEBS EMBO 2014 Conference, Paris, France, 30 August - 04 September 2014, vol.281, pp.387
- XV. The role of peripheral anionic site in binding of toluidine blue O to human butyrylcholinesterase**  
BİBEROĞLU K., Turk Ghasemi S., YÜKSEL TEK M., TACAL Ö.  
FEBS EMBO, 30 August - 04 September 2014
- XVI. Proline rich peptides from soluble tetrameric fetal bovine serum acetylcholinesterase and horse butyrylcholinesterase**  
BİBEROĞLU K., M SCHOPFER L., ASHİMA S., TACAL Ö., OKSANA L.  
11th meeting on cholinesterase, 4 - 09 June 2012
- XVII. Inhibition of A328F butyrylcholinesterase mutant by Nile blue**  
BİBEROĞLU K., TACAL Ö.  
36th FEBS Congress, 25 - 30 June 2011
- XVIII. Production of recombinant dehydrogenase in Escherichia Coli**  
BİBEROĞLU K., TACAL Ö.  
MAGUM, 27 - 29 May 2011
- XIX. The role of Phe329 in the inhibition of human butyrylcholinesterase by malachite green and methyl green**  
BİBEROĞLU K., Tacal Ö., AKBULUT H.  
35th FEBS Congress, 26 June - 01 July 2010
- XX. Inhibition of A277V mutant of human butyrylcholinesterase by malachite green**  
BİBEROĞLU K., OZDEN T., AKBULUT H.  
34th Congress of the Federation-of-European-Biochemical-Societies, Prague, Czech Republic, 4 - 09 July 2009, vol.276, pp.130

## Supported Projects

TACAL Ö., BİBEROĞLU K., YÜKSEL M., ÖNDER S., Project Supported by Higher Education Institutions, Fenotiyazin yapısındaki kolinesteraz inhibitörlerinin amiloid prekürsör protein metabolizması ve tau üzerindeki etki mekanizmalarının araştırılması, 2019 - 2022

BİBEROĞLU K., YÜKSEL TEK M., ÖNDER S., TACAL Ö., Project Supported by Higher Education Institutions, İnsan pankreas kanseri hücre hattında fenotiyazin yapılı bileşiklerin amiloid prekürsörbenzeri protein 2 üzerindeki etkilerinin değerlendirilmesi ve etki mekanizmalarının araştırılması, 2017 - 2021

BİBEROĞLU K., Project Supported by Higher Education Institutions, Fenotiyazin yapılı bileşiklerin beta-sekretaz 1 enzimi üzerine etkilerinin hücre içermeyen sistemde incelenmesi, 2017 - 2018

UÇAR G., ERİKÇİ A., BAYSAL İ., ERCAN A., YÜKSEL TEK M., BİBEROĞLU K., TÜYLÜ KÜÇÜKKILINÇ Z. T., AYAZGÖK B., TACAL Ö., YABANOĞLU ÇİFTÇİ S., et al., Project Supported by Higher Education Institutions, ECF385 Biyokimya III Laboratuvar Ders İçeriğinin Klinik Biyokimya Yöntemleri ile Zenginleştirilerek Güncellenmesi, 2015 - 2016

BİBEROĞLU K., ÖNDER S., TACAL Ö., YÜKSEL TEK M., Project Supported by Higher Education Institutions, Azur B'nin amiloid beta peptidler üzerindeki etkilerinin araştırılması, 2015 - 2016

BİBEROĞLU K., Project Supported by Higher Education Institutions, PS70 hücrelerinde amiloid peptid düzeylerine tiyoninin etkisi, 2015 - 2015

## Metrics

Publication: 36

Citation (WoS): 98

Citation (Scopus): 112

H-Index (WoS): 6

H-Index (Scopus): 6

## Non Academic Experience

University of Nebraska Medical Center, The Eppley Institute

ÖLÇME, SEÇME VE YERLEŞTİRME MERKEZİ BAŞKANLIĞI

University of Nebraska Medical Center, The Eppley Institute