

# Asst. Prof. BERNA GÜVEN ÇİLOĞLU

## Personal Information

**Office Phone:** [+90 312 203 3138](tel:+903122033138)

**Email:** [bguven@ankara.edu.tr](mailto:bguven@ankara.edu.tr)

**Web:** <https://avesis.ankara.edu.tr/bguven>

### International Researcher IDs

ORCID: 0000-0001-9181-3741

ScopusID: 57197820123

Yoksis Researcher ID: 205436

## Education Information

2021 - 2022	Post Doctorate, University of Alberta, Faculty of Medicine, Pediatrics, Canada
2014 - 2019	Doctorate, Ankara University, Sağlık Bilimleri Enstitüsü, Farmakoloji (Dr) (Eczacılık), Turkey
2008 - 2013	Undergraduate, Gazi University, Eczacılık Fakültesi, Eczacılık Pr., Turkey

## Research Areas

Pharmacology and Therapeutics, Professional Sciences, Pharmacology, Health Sciences

## Academic Titles / Tasks

2014 - Continues	Assistant Professor, Ankara University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri Bölümü
------------------	--

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

- I. Mitochondrial fatty acid oxidation is the major source of cardiac ATP production in heart failure with preserved ejection fraction.**  
Sun Q., Güven B., Wagg C. S., de Oliveira A. A., Silver H., Zhang L., Chen B., Wei K., Ketema E., Karwi Q. G., et al.  
Cardiovascular research, 2024 (SCI-Expanded)
- II. Obesity Is a Major Determinant of Impaired Cardiac Energy Metabolism in Heart Failure with Preserved Ejection Fraction.**  
Güven B., Sun Q., Wagg C. S., Almeida de Oliveira A., Silver H., Persad K. L., Onay-Besikci A., Vu J., Oudit G. Y., Lopaschuk G. D.  
The Journal of pharmacology and experimental therapeutics, vol.388, no.1, pp.145-155, 2024 (SCI-Expanded)
- III. Stimulating cardiac glucose oxidation lessens the severity of heart failure in aged female mice.**  
Sun Q., Wagg C. S., Güven B., Wei K., de Oliveira A. A., Silver H., Zhang L., Vergara A., Chen B., Wong N., et al.  
Basic research in cardiology, 2023 (SCI-Expanded)
- IV. Past and present of beta arrestins: A new perspective on insulin secretion and effect.**  
GÜVEN B., Onay-Besikci A.  
European journal of pharmacology, vol.956, pp.175952, 2023 (SCI-Expanded)
- V. Combined levothyroxine and testosterone treatment for restoring erectile dysfunction in propylthiouracil-induced hypothyroid rats**  
Korkmaz F. N., Yilmaz-Oral D., Asker H., Guven B., Turkcan D., Kirlangic Ö. F., Oztekin C. V., Çorapçoğlu D., Demir Ö., Ates İ., et al.  
JOURNAL OF SEXUAL MEDICINE, vol.20, no.6, pp.732-741, 2023 (SCI-Expanded)
- VI. In Vitro and in Silico Evaluation of Some New 1H-Benzimidazoles Bearing Thiosemicarbazide and**

### **Triazole as Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitor**

ÇELİK İ., Ayhan-Kilcigil G., GÜVEN B., Kara Z., Onay-Besikci A.

POLYCYCLIC AROMATIC COMPOUNDS, vol.43, no.1, pp.444-455, 2023 (SCI-Expanded)

### **VII. Pleiotropic vascular effects of ivabradine in streptozotocin-induced diabetes**

Kara Z., GÜVEN B., BEŞİKCİ A., YILDIRIM N., ALTUNAY H.

EUROPEAN JOURNAL OF PHARMACOLOGY, vol.916, 2022 (SCI-Expanded)

### **VIII. Synthesis, molecular docking, in silico ADME, and EGFR kinase inhibitor activity studies of some new benzimidazole derivatives bearing thiosemicarbazide, triazole, and thiadiazole**

ÇELİK İ., Ayhan-Kilcigil G., Karayel A., GÜVEN B., BEŞİKCİ A.

JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.59, no.2, pp.371-387, 2022 (SCI-Expanded)

### **IX. Metabolic effects of carvedilol through beta-arrestin proteins: investigations in a streptozotocin-induced diabetes rat model and in C2C12 myoblasts**

GÜVEN B., Kara Z., BEŞİKCİ A.

BRITISH JOURNAL OF PHARMACOLOGY, vol.177, no.24, pp.5580-5594, 2020 (SCI-Expanded)

### **X. Design, synthesis and docking studies of benzimidazole derivatives as potential EGFR inhibitors**

ÇELİK İ., KILCIGİL G., GÜVEN B., Kara Z., Gurkan-Alp A. S., KARAYEL A., BEŞİKCİ A.

EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.173, pp.240-249, 2019 (SCI-Expanded)

## **Articles Published in Other Journals**

### **I. The Impact of Levothyroxine and Testosterone Administration on Bladder Contractility in the Rat Model of Propylthiouracil-Induced Hypothyroidism**

YILMAZ ORAL D., GÜVEN ÇİLOĞLU B., GÜR S.

UROLOGY RESEARCH AND PRACTICE, 2024 (Peer-Reviewed Journal)

### **II. Synthesis and Pharmacologic Evaluation of Some Benzimidazole Acetohydrazide Derivatives as EGFR Inhibitors**

Demirel S., KILCIGİL G., Kara Z., GÜVEN B., BEŞİKCİ A.

TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.14, no.3, pp.285-289, 2017 (ESCI)

## **Books & Book Chapters**

### **I. Beta Arrestin**

BEŞİKCİ A., GÜVEN B.

in: Kalp Yetersizliği ve Tedavisinde Yeni Hedefler, , Editor, Türkiye Klinikleri, pp.159-161, 2023

### **II. Herpes Enfeksiyonlarında Kullanılan İlaçlar**

GÜVEN B., ARSLAN E., BEŞİKCİ A.

in: Viral Enfeksiyonlarda Güncel Tedavi Yaklaşımları ve İmmünizasyon, Erdinç Meral, Editor, Ortadoğu, Ankara, pp.61-68, 2021

### **III. C Vitamini, D Vitamini, Çinko: COVID-19 Tedavisinde Mikro Besinlerden Makro Beklenti Gerçekçi mi?**

GÜVEN B., Kara Z., BEŞİKCİ A.

in: Türkiye Klinikleri, Birengel Serhat, Balık İsmail, Editor, Ortadoğu, Ankara, pp.53-58, 2021

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

### **I. Chronic Effects of Carvedilol on Erectile Dysfunction in STZ-Induced Diabetic Rats**

GÜVEN ÇİLOĞLU B., YILMAZ ORAL D., KARA Z., GÜR S., BEŞİKCİ A.

14. Uluslararası Tıp ve Sağlık Bilimleri Araştırmaları Kongresi- UTSAK, Ankara, Turkey, 23 - 24 December 2023

### **II. The Warburg effect is reduced in matured cardiomyocytes due primarily to a decrease in glycolysis**

PERSAD K. L., ANDRE D. J., GÜVEN ÇİLOĞLU B., HOUNCAREN M., ZHANG L., GREENWOOD J., LOPASCHUK G.

ISHR 2022, Winnipeg, Canada, 6 - 09 September 2022

- III. **Ketones promote maturation of proliferating H9c2 cardiomyocytes.**  
PERSAD K. L., GÜVEN B., HOUNCAREN M., LOPASCHUK G.  
Society of Heart and Vascular Metabolism, Seoul, South Korea, 16 October 2022
- IV. **Cardiac glucose oxidation is suppressed in heart failure with preserved ejection fraction**  
SUN Q., GÜVEN B., WAGG C., OLIVEIRA A. A., SILVER H., ZHANG L., VERGERA A., CHEN B., KARWI Q. G., WANG F., et al.  
Society for Heart and Vascular Metabolism, Seoul, South Korea, 16 - 19 October 2022
- V. **Metabolic Effects of Carvedilol on Control and HFpEF Mouse Heart and Hypertrophied H9c2 Cells: The Potential Contribution of a Biased Agonist Effect**  
GÜVEN B., QIUYU S., PERSAD K. L., WAGG C., OLIVEIRA A. A., SILVER H., ANDRE D. J., BEŞİKCİ A., OUDIT G. Y., Lopaschuk G. D.  
ECCR 2022, Treviso, Italy, 30 September - 02 October 2022
- VI. **Cardiac glucose oxidation is impaired in heart failure with preserved ejection fraction (HFpEF).**  
Sun Q., Güven B., Wagg C., Oliveira A. A., Silver H., Arana A., Chen B., Karwi Q. G., Wang F., Zhang L., et al.  
ISHR 2022, Winnipeg, Canada, 06 September 2022
- VII. **Treatment with levothyroxine and testosterone ameliorated erectile dysfunction in a rat model of propylthiouracil-induced hypothyroidism**  
YILMAZ ORAL D., ASKER H., GÜVEN B., KIRLANGIÇ Ö. F., ÖZTEKİN Ç. V., GÜR S.  
22nd Annual Fall Scientific Meeting of SMSNA, United States Of America, 24 October 2021
- VIII. **The direct metabolic effects of carvedilol in control mice hearts and hypertrophied H9c2 cells**  
GÜVEN B., WAGG C. S., PERSAD K. L., SUN Q., ANDRE D. J., BEŞİKCİ A., LOPASCHUK G. D.  
Pediatrics Research Day, Edmonton, Canada, 06 April 2022
- IX. **Cardiac Glucose Oxidation Rates are Depressed in Heart Failure with Preserved Ejection Fraction (HFpEF)**  
SUN Q., GÜVEN B., WAGG C. S., OLIVEIRA A. A., SILVER H., ZHANG L., WANG F., KARWI Q. G., OUDIT G. Y., LOPASCHUK G. D.  
Pediatrics Research Day, Edmonton, Canada, 06 April 2022
- X. **Treatment with levothyroxine and testosterone ameliorated erectile dysfunction in rat model of propylthiouracil-induced hypothyroidism**  
KORKMAZ F., YILMAZ ORAL D., ASKER H., GÜVEN B., TÜRKCAN D., KIRLANGIÇ Ö. F., ÖZTEKİN Ç. V., GÜR S.  
22nd Annual Fall Scientific Meeting of SMSNA, Scottsdale, United States Of America, 21 - 24 October 2021, vol.19, pp.30-31
- XI. **CURCUMIN LOADED SEMISOLID SLN DISPERSIONS: FORMULATION OPTIMIZATION AND IN VIVO EVALUATION**  
KARGILI ŞEN A., BADILLI F. U., YEĞEN G., GÜVEN B., AKSU N. B., BEŞİKCİ A.  
13th International Symposium on Pharmaceutical Sciences (ISOPS-13), Turkey, 22 June 2021
- XII. **Design and Synthesis of Some Oxadiazole Bearing Benzimidazole Derivatives as Potential Epidermal Growth Factor Receptor (EGFR) Inhibitors**  
ÇELİK İ., KILCIGİL G., GÜVEN B., BEŞİKCİ A., Kara Z.  
ICMBC 2019 : International Conference on Medicinal and Biological Chemistry, Barselona, Spain, 15 - 16 August 2019
- XIII. **Metabolic effects of carvedilol through  $\beta$ -arrestin-2: investigations in cells and streptozotocin-diabetic rats**  
GÜVEN B., KARA Z., BEŞİKCİ A.  
17th Annual Meeting of the Society for Heart and Vascular Metabolism (SHVM), 23 - 26 June 2019
- XIV. **Presence of HCN Channels in Rat Aorta and Prevention of Endothelial Dysfunction with Their Selective Inhibitor Ivabradine**  
kara z., GÜVEN B., BEŞİKCİ A.  
Pharmacology 2018, Londrina, Brazil, 17 - 19 December 2018
- XV. **Synthesis of Some Thiadiazole/Triazole Linked 1H-Benzimidazole Derivatives As Inhibitors of EGFR**

## Tyrosine Kinase

ÇELİK İ., KILCIGİL G., BEŞİKCİ A., KARA Z., GÜVEN B.

Eczacılık Kongre ve Fuarı, Paris, France, 20 - 21 August 2018

XVI. **THE EFFECT OF CARVEDILOL TREATMENT ON ERECTILE DYSFUNCTION IN STREPTOZOTOCIN INDUCED DIABETIC RATS.**

YILMAZ D., GÜVEN B., KARA Z., GÜR S., BEŞİKCİ A.

12th INTERNATIONAL SYMPOSIUM ON PHARMACEUTICAL SCIENCES, Ankara, Turkey, 26 - 29 June 2018

XVII. **THE POSSIBLE BENEFICIAL EFFECT OF IVABRADINE TREATMENT ON ERECTILE TISSUE IN A DIABETIC RAT MODEL**

YILMAZ D., KARA Z., GÜVEN B., BEŞİKCİ A., GÜR S.

12th INTERNATIONAL SYMPOSIUM ON PHARMACEUTICAL SCIENCES, Ankara, Turkey, 26 - 29 June 2018

XVIII. **SYNTHESIS OF SOME 1H-BENZIMIDAZOLES CONTAINING CYCLOHEXYL SUBSTITUTED THIOSEMICARBAZIDES, TRIAZOLES, THIADIAZOLES AS INHIBITORS OF EGFR TYROSINE KINASE**

ÇELİK İ., KILCIGİL G., KARA Z., GÜVEN B., BEŞİKCİ A.

GPSS2017, 11 - 13 October 2017

XIX. **Investigation of the Pleiotropic Vascular Effects of Ivabradine in Control and Diabetic Rats**

Kara Z., GÜVEN B., BEŞİKCİ A.

20th Annual Meeting of European Council for Cardiovascular Research, ECCR, Verona, Italy, 14 - 16 October 2016

## Supported Projects

2023 - 2026	Korunmuş Ejeksiyon Fraksiyonlu Kalp Yetmezliği Modelinde İnflamatuar Sinyal Yolaklarının Kalp ve Damarlarda İncelenmesi: Keton Tüketiminin ve GGR109a Reseptörlerinin Etkisi, TUBITAK Project
2022 - 2024	FFAR4 agonisti TUG-891'in hiperglisemik koşullarda H9c2 kardiyomyoblast hücrelerde gevşeme yolağı bileşenleri üzerine etkisinin incelenmesi, Project Supported by Higher Education Institutions
2021 - 2023	SARS-CoV-2 Main proteaz (Mpro) inhibitörü yeni benzimidazol türevlerinin in silico tasarım, sentez ve biyolojik aktivite değerlendirilmesi, Project Supported by Higher Education Institutions
2018 - 2019	Bir Biased Agonist Olarak Karvedilol: Metabolik Sonuçlar Ve Mitokondriyel Biyojenezin Hücre Dizilerinde Değerlendirilmesi, TUBITAK Project

## Metrics

Publication: 34

Citation (WoS): 80

Citation (Scopus): 88

H-Index (WoS): 5

H-Index (Scopus): 5

## Scholarships

2021 - 2022	2219, TUBITAK
2014 - 2018	2211A, TUBITAK