

Assoc. Prof. HATİCE GÜNEŞ ÖZHAN

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International Researcher IDs

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Education Information

Undergraduate, Anadolu University, Open Education Faculty, Department Of Sociology, Turkey 2018 - 2022

Doctorate, Eberhard Karls Universitaet Tübingen, Biyoloji Fakültesi, Biyoloji, Germany 2005 - 2009

Postgraduate, Georg-August-Universitaet Göttingen, Faculty Of Biology, Germany 2003 - 2005

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey 1998 - 2003

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Germ line and mesoderm specification in the amphipod crustacean Parhyale hawaiiensis and their evolution in arthropods, Eberhard Karls Universitaet Tübingen, Fakultät Für Biologie (Biyoloji Fakültesi), 2009

Postgraduate, INITIAL STEPS IN CHARACTERIZATION OF THE GERMLAYER FORMATION IN THE AMPHIPOD CRUSTACEANPARHYALE HAWAIENSIS, Georg-August-Universitaet Göttingen, Faculty Of Biology, 2005

Research Areas

Molecular Biology and Genetics, Genetic Disorders, Genetic Engineering, Animal Molecular Genetics

Academic Titles / Tasks

Associate Professor, Dokuz Eylul University, İzmir Uluslararası Biyotıp ve Genom Enstitüsü, Biyotıp Ve Sağlık Teknolojileri Anabilim Dalı, 2016 - Continues

Assistant Professor, Dokuz Eylul University, Sağlık Bilimleri Enstitüsü, 2014 - 2016

Research Assistant, Technische Universitaet Dresden, Medizinische Fakultät (Tıp Fakültesi), Biotechnology Center Of The Tu Dresden (Tu Dresden Biyoteknoloji Merkezi), 2009 - 2014

Research Assistant, Eberhard Karls Universitaet Tübingen, Fakultät Für Biologie (Biyoloji Fakültesi), Max Planck Institute For Developmental Biology, 2005 - 2009

Research Assistant, Georg-August-Universitaet Göttingen, Fakultät Für Biologie Und Psychologie (Biyoloji Ve Fizyoloji Fakültesi), International Max Planck Research School , 2003 - 2005

Academic and Administrative Experience

Dokuz Eylul University, 2019 - Continues

Dokuz Eylul University, 2014 - Continues

Courses

Uzmanlık Alanı, Doctorate, 2015 - 2016

Özel Araştırma, Doctorate, 2015 - 2016

Gelişim Biyolojisi, Doctorate, 2015 - 2016, 2014 - 2015

Tez Çalışması, Doctorate, 2015 - 2016

Teze İlişkin Araştırma Konuları , Doctorate, 2015 - 2016

Teze İlişkin Araştırma Konuları , Postgraduate, 2014 - 2015

TIP BİLİMLERİNE GİRİŞ, Undergraduate, 2014 - 2015

Özel Araştırma, Postgraduate, 2014 - 2015

Moleküler Biyolojide Özel Konular, Postgraduate, 2014 - 2015

Doku ve organ rejenerasyonunun çeşitleri ve moleküler mekanizmaları, Undergraduate, 2014 - 2015

Seminer, Postgraduate, 2014 - 2015

Wnt Signaling and Regeneration, Postgraduate, 2012 - 2013, 2011 - 2012

Advising Theses

ÖZHAN H. G., ÖZHAN H., β -katenin sinyal iletiminin araştırılması, Doctorate, A.YAĞMUR(Student), 2022

ÖZHAN H. G., Alzheimer hastalığı için yeni tedavi seçeneklerinin toksik etkilerinin ve etkinliklerinin amiloid toksisite zebra balığı beyin modelinde test edilmesi, Postgraduate, Y.KAAN(Student), 2022

ÖZHAN H. G., Beyin rejenerasyonu ve glioma moleküler mekanizmalarının zebrabalığı modeli kullanılarak gliomalarda terapötik yaklaşımlar geliştirilmesi için karşılaştırmalı olarak analizi, Doctorate, Y.DEMİRCİ(Student), 2021

ÖZHAN H. G., INVESTIGATION OF THE ROLE OF NEUROTROPHIN RECEPTOR ASSOCIATED DEATH DOMAIN PROTEIN IN REGULATION OF WNT/B-CATENIN SIGNALING USING THE EMBRYONIC AND CRISPR/CAS9 KNOCKOUT MODELS OF ZEBRAFISH, Postgraduate, Ö.ÇARK(Student), 2021

ÖZHAN H. G., β - katenin sinyal iletiminin düzenlenmesindeki rolünün zebra balığı modelinde araştırılması, Postgraduate, Ö.ÇARK(Student), 2021

ÖZTÜRK M., ÖZHAN H. G., FAM134B'nin biyolojik işlevleri ve kanserle ilişkisi, Doctorate, U.KELEŞ(Student), 2020

ÖZHAN H. G., Investigation of the role of Wnt/ β -catenin signaling in brain regeneration using zebrafish as a model system, Postgraduate, G.CUCUN(Student), 2020

ÖZHAN H. G., β -katenin sinyal yolağının zebrabalığı modeli kullanılarak beyin rejenerasyonundaki rolünün araştırılması, Postgraduate, G.CUCUN(Student), 2020

ÖZHAN H. G., ATABEY S. N., Sivi teğetsel gerilme stresinin hepatoselüler karsinoma hücrelerinin biyolojik davranışlarına C-met sinyal yolağı aracılıklı etkilerinin araştırılması, Postgraduate, D.ÇÖMEZ(Student), 2019

ÖZHAN H. G., Zebra balığının model organizma olarak kullanılarak melanosit rejenerasyonu ve melanomun moleküler mekanizmalarının karşılaştırılması, Postgraduate, E.KATKAT(Student), 2018

ÖZHAN H. G., Purinerjik reseptörler ile WNT/ β -katenin sinyal yolağı arasındaki ilişkisinin zebra balığı modelinde araştırılması, Postgraduate, İ.KÜÇÜKAYLAK(Student), 2017

ÖZHAN H. G., β -catenin signaling and death receptor in zebrafish model organism, Postgraduate, B.HAYKIR(Student), 2017

ÖZHAN H. G., β -catenin signaling pathway using zebrafish model, Postgraduate, İ.KÜÇÜKAYLAK(Student), 2017

ÖZHAN H. G., Ölüm reseptörü ile WNT/ β -katenin sinyal yolağı arasındaki ilişkinin zebra balığı modelinde araştırılması, Postgraduate, B.HAYKIR(Student), 2017

ÖZHAN H. G., Understanding the molecular mechanisms of the WNT-receptor complex activation on cell membrane region, Postgraduate, A.YAĞMUR(Student), 2017

ÖZHAN H. G., Effects of resveratrol and quercetin on vitamin d metabolizing cytochrome p450 enzymes, Postgraduate, M.AKKULAK(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Mitigation potential of zingerone and rutin on toxicity mechanisms of nickel to zebrafish based on morphological, DNA damage and apoptosis outcome analysis**
Köktürk M., YILDIRIM S., ATAMANALP M., KILIÇLIOĞLU M., UÇAR A., Ozhan G., ALAK G.
Journal of Trace Elements in Medicine and Biology, vol.80, 2023 (SCI-Expanded)
- II. **Comparative membrane lipidomics of hepatocellular carcinoma cells reveals diacylglycerol and ceramide as key regulators of Wnt/ β -catenin signaling and tumor growth**
Azbazdar Y., Demirci Y., Heger G., Ipekgil D., Karabicici M., Ozhan G.
Molecular Oncology, vol.17, no.11, pp.2314-2336, 2023 (SCI-Expanded)
- III. **Addition of exogenous diacylglycerol enhances Wnt/ β -catenin signaling through stimulation of macropinocytosis**
Azbazdar Y., Tejeda-Munoz N., Monka J. C., Dayrit A., Binder G., Ozhan G., De Robertis E. M.
iScience, vol.26, no.10, 2023 (SCI-Expanded)
- IV. **LC-ESI-MS/MS analysis of secondary metabolites of different St. John's wort (*Hypericum perforatum*) extracts used as food supplements and evaluation of developmental toxicity on zebrafish (*Danio rerio*) embryos and larvae**
Atalar M. N., Köktürk M., Altındağ F., Ozhan G., Özen T., Demirtas İ., GÜLÇİN İ.
South African Journal of Botany, vol.159, pp.580-587, 2023 (SCI-Expanded)
- V. **High-fat diet feeding triggers a regenerative response in the adult zebrafish brain**
Azbazdar Y., Poyraz Y. K., Ozalp O., Nazli D., Ipekgil D., Cucun G., Ozhan G.
Molecular Neurobiology, vol.60, no.5, pp.2486-2506, 2023 (SCI-Expanded)
- VI. **Canonical Wnt and TGF- β /BMP signaling enhance melanocyte regeneration but suppress invasiveness, migration, and proliferation of melanoma cells**
Katkat E., Demirci Y., Heger G., Karagulle D., Papatheodorou I., Brazma A., Ozhan G.
Frontiers in Cell and Developmental Biology, vol.11, 2023 (SCI-Expanded)
- VII. **What is the eco-toxicological level and effects of graphene oxide-boramic acid (GO-ED-BA NP)?: In vivo study on Zebrafish embryo/larvae**
Kokturk M., Yildirim S., Yigit A., Ozhan G., BOLAT İ., Alma M. H., Mengeş N., ALAK G., ATAMANALP M.
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.10, no.5, 2022 (SCI-Expanded)
- VIII. **Assessment of oxidative DNA damage, apoptosis and histopathological alterations on zebrafish exposed with green silver nanoparticle**
Kokturk M., Yildirim S., ATAMANALP M., ÇALIMLI M. H., NAS M. S., BOLAT İ., Ozhan G., ALAK G.
CHEMISTRY AND ECOLOGY, vol.38, no.7, pp.655-670, 2022 (SCI-Expanded)
- IX. **Investigation of the Oxidative Stress Response of a Green Synthesis Nanoparticle (RP-Ag/ACNPs) in Zebrafish**
Kokturk M., YILDIRIM S., NAS M. S., Ozhan G., ATAMANALP M., BOLAT İ., ÇALIMLI M. H., ALAK G.
BIOLOGICAL TRACE ELEMENT RESEARCH, vol.200, no.6, pp.2897-2907, 2022 (SCI-Expanded)
- X. **A Novel Missense Variant in Actin Binding Domain of MYH7 Is Associated With Left Ventricular Noncompaction**
Hesarakı M., Bora U., Pahlavan S., Salehi N., Mousavi S. A., Barekat M., Rasouli S. J., Baharvand H., ÖZHAN H. G., Totonchi M.

FRONTIERS IN CARDIOVASCULAR MEDICINE, vol.9, 2022 (SCI-Expanded)

- XI. **Brain Regeneration Resembles Brain Cancer at Its Early Wound Healing Stage and Diverges From Cancer Later at Its Proliferation and Differentiation Stages.**
Demirci Y., Heger G., Katkat E., Papatheodorou I., Brazma A., Ozhan G.
Frontiers in cell and developmental biology, vol.10, pp.813314, 2022 (SCI-Expanded)
- XII. **Perspective on green synthesis of RP-Pd/AC NPs: characterization, embryonic and neuronal toxicity assessment**
Kokturk M., Yildirim S., Calimli M. H., Nas M. S., Ibaokurgil F., Ozhan G., Atamanalp M., Alak G.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, 2022 (SCI-Expanded)
- XIII. **Misregulation of Wnt Signaling Pathways at the Plasma Membrane in Brain and Metabolic Diseases**
Karabici M., Azbazdar Y., İŞCAN E., ÖZHAN H. G.
MEMBRANES, vol.11, no.11, 2021 (SCI-Expanded)
- XIV. **Editorial: Wnt Signaling at the Plasma Membrane: Activation, Regulation and Disease Connection**
Ozhan G.
FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.9, 2021 (SCI-Expanded)
- XV. **Changes in Wnt and TGF-beta Signaling Mediate the Development of Regorafenib Resistance in Hepatocellular Carcinoma Cell Line HuH7**
Karabici M., Azbazdar Y., Ozhan G., Şentürk Ş., Firtina Karagonlar Z., Erdal E.
FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.09, 2021 (SCI-Expanded)
- XVI. **LGR5/R-Spo1/Wnt3a axis promotes stemness and aggressive phenotype in hepatoblast-like hepatocellular carcinoma cell lines**
Akbari S., Kunter I., Azbazdar Y., ÖZHAN H. G., Atabey N., Karagonlar Z. F., ERDAL BAĞRIYANIK Ş. E.
CELLULAR SIGNALLING, vol.82, 2021 (SCI-Expanded)
- XVII. **Wnt3 Is Lipidated at Conserved Cysteine and Serine Residues in Zebrafish Neural Tissue**
Dhasmana D., Veerapathiran S., Azbazdar Y., Nelanuthala A. V. S., Teh C., Ozhan G., Wohland T.
FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.9, 2021 (SCI-Expanded)
- XVIII. **Textile dyes Maxilon blue 5G and Reactive blue 203 induce acute toxicity and DNA damage during embryonic development of Danio rerio**
Kokturk M., Altındağ F., ÖZHAN H. G., ÇALIMLI M. H., NAS M. S.
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY, vol.242, 2021 (SCI-Expanded)
- XIX. **TAp73β Can Promote Hepatocellular Carcinoma Dedifferentiation**
Iscan E., Ekin U., Yildiz G., Oz O., Keles U., Suner Karakulah A., Çakan Akdoğan G., Özhan H. G., Nekulova M., Vojtesek B., et al.
CANCERS, no.4, 2021 (SCI-Expanded)
- XX. **Nradd Acts as a Negative Feedback Regulator of Wnt/beta-Catenin Signaling and Promotes Apoptosis**
Ozalp O., Cark O., Azbazdar Y., Haykir B., Cucun G., Kucukaylak I., Alkan-Yesilyurt G., Sezgin E., ÖZHAN H. G.
BIOMOLECULES, vol.11, no.1, 2021 (SCI-Expanded)
- XXI. **Regulation of Wnt Signaling Pathways at the Plasma Membrane and Their Misregulation in Cancer**
Azbazdar Y., Karabici M., ERDAL BAĞRIYANIK Ş. E., ÖZHAN H. G.
FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.9, 2021 (SCI-Expanded)
- XXII. **Comparative Transcriptome Analysis of the Regenerating Zebrafish Telencephalon Unravels a Resource With Key Pathways During Two Early Stages and Activation of Wnt/beta-Catenin Signaling at the Early Wound Healing Stage**
Demirci Y., Cucun G., Poyraz Y. K., Mohammed S., Heger G., Papatheodorou I., ÖZHAN H. G.
FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.8, 2020 (SCI-Expanded)
- XXIII. **Agonist of RORA Attenuates Nonalcoholic Fatty Liver Progression in Mice via Up-regulation of MicroRNA 122**
Chai C., Cox B., Yaish D., Gross D., Rosenberg N., Amblard F., Shemuelian Z., Gefen M., Korach A., Tirosh O., et al.
GASTROENTEROLOGY, vol.159, no.3, pp.999-1023, 2020 (SCI-Expanded)

- XXIV. **More Favorable Palmitic Acid Over Palmitoleic Acid Modification of Wnt3 Ensures Its Localization and Activity in Plasma Membrane Domains**
 Azbazdar Y., Ozalp O., Sezgin E., Veerapathiran S., Duncan A. L., Sansom M. S. P., Eggeling C., Wohland T., KARACA EREK E., ÖZHAN H. G.
 FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.7, 2019 (SCI-Expanded)
- XXV. **Investigation of the genetic pathways in early and late stage brain regeneration using the zebrafish model**
 Demirci Y., Cucun G., Papatheodorou I., ÖZHAN H. G.
 FEBS OPEN BIO, vol.9, pp.179, 2019 (SCI-Expanded)
- XXVI. **Effect of quercetin on mRNA and protein expressions of vitamin D metabolizing CYP27B1 and CYP24A1 in human embryonic kidney cell line (HEK-293)**
 Akkulak M., Evin E., Durukan O., ÖZHAN H. G., ADALI O.
 FEBS OPEN BIO, vol.8, pp.352, 2018 (SCI-Expanded)
- XXVII. **Binding of canonical Wnt ligands to their receptor complexes occurs in ordered plasma membrane environments**
 Sezgin E., Azbazdar Y., Ng X. W., Teh C., Simons K., Weidinger G., Wohland T., Eggeling C., Ozhan G.
 FEBS JOURNAL, vol.284, no.15, pp.2513-2526, 2017 (SCI-Expanded)
- XXVIII. **Diffusion of lipids and GPI-anchored proteins in actin-free plasma membrane vesicles measured by STED-FCS**
 Schneider F., Waithe D., Clausen M. P., Galiani S., Koller T., ÖZHAN H. G., Eggeling C., Sezgin E.
 MOLECULAR BIOLOGY OF THE CELL, vol.28, no.11, pp.1507-1518, 2017 (SCI-Expanded)
- XXIX. **Simplet/Fam53b is required for Wnt signal transduction by regulating beta-catenin nuclear localization**
 Kizil C., Kuechler B., Yan J., Oezhan G., Moro E., Argenton F., Brand M., Weidinger G., Antos C. L.
 DEVELOPMENT, vol.141, no.18, pp.3529-3539, 2014 (SCI-Expanded)
- XXX. **Wnt/beta-Catenin Signaling Defines Organizing Centers that Orchestrate Growth and Differentiation of the Regenerating Zebrafish Caudal Fin**
 Wehner D., Cizelsky W., Vasudevaro M. D., Oezhan G., Haase C., Kagermeier-Schenk B., Roeder A., Dorsky R. I., Moro E., Argenton F., et al.
 CELL REPORTS, vol.6, no.3, pp.467-481, 2014 (SCI-Expanded)
- XXXI. **Dynamic Association with Donor Cell Filopodia and Lipid-Modification Are Essential Features of Wnt8a during Patterning of the Zebrafish Neuroectoderm**
 Luz M., Spann-Mueller S., Oezhan G., Kagermeier-Schenk B., Rhinn M., Weidinger G., Brand M.
 PLOS ONE, vol.9, no.1, 2014 (SCI-Expanded)
- XXXII. **Lypd6 Enhances Wnt/beta-Catenin Signaling by Promoting Lrp6 Phosphorylation in Raft Plasma Membrane Domains**
 Oezhan G., Sezgin E., Wehner D., Pfister A. S., Kuehl S. J., Kagermeier-Schenk B., Kuehl M., Schwille P., Weidinger G.
 DEVELOPMENTAL CELL, vol.26, no.4, pp.331-345, 2013 (SCI-Expanded)
- XXXIII. **The histone demethylase UTX regulates stem cell migration and hematopoiesis**
 Thieme S., Gyrfas T., Richter C., Oezhan G., Fu J., Alexopoulou D., Muders M. H., Michalk I., Jakob C., Dahl A., et al.
 BLOOD, vol.121, no.13, pp.2462-2473, 2013 (SCI-Expanded)
- XXXIV. **In vivo Wnt signaling tracing through a transgenic biosensor fish reveals novel activity domains**
 Moro E., Ozhan-Kizil G., Mongera A., Beis D., Wierzbicki C., Young R. M., Bournele D., Domenichini A., Valdivia L. E., Lum L., et al.
 DEVELOPMENTAL BIOLOGY, vol.366, no.2, pp.327-340, 2012 (SCI-Expanded)
- XXXV. **Waif1/5T4 Inhibits Wnt/beta-Catenin Signaling and Activates Noncanonical Wnt Pathways by Modifying LRP6 Subcellular Localization**
 Kagermeier-Schenk B., Wehner D., Oezhan-Kizil G., Yamamoto H., Li J., Kirchner K., Hoffmann C., Stern P., Kikuchi A., Schambony A., et al.
 DEVELOPMENTAL CELL, vol.21, no.6, pp.1129-1143, 2011 (SCI-Expanded)
- XXXVI. **Germ cells in the crustacean Parhyale hawaiiensis depend on Vasa protein for their maintenance but**

not for their formation

Oezhan-Kizil G., Havemann J., Gerberding M.

DEVELOPMENTAL BIOLOGY, vol.327, no.1, pp.230-239, 2009 (SCI-Expanded)

Articles Published in Other Journals

I. Thioredoxin interacting protein promotes invasion in hepatocellular carcinoma

Gunes A., Bagirsakci E., İŞCAN E., ÇAKAN AKDOĞAN G., aykutlu u., ŞENTÜRK Ş., ÖZHAN H. G., ERDAL BAĞRIYANIK Ş. E., NART D., YILMAZ BARBET F., et al.

Oncotarget, vol.9, no.96, 2018 (Scopus)

II. Wnt/ β -catenin signaling in heart regeneration

ÖZHAN H. G., Weidinger G.

Cell Regeneration, vol.4, no.1, 2015 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. TAP73ün Hepatoselüler Karsinomada Pro-tümörojenik Rolü

İŞCAN E., YILDIZ G., ÖZ Ö., EKİN U., KELEŞ U., KARAKÜLAH G., SUNER KARAKÜLAH A., ÇAKAN AKDOĞAN G., ÖZHAN H. G., ÖZTÜRK M.

ONKOLOJİDE İZ BIRAKANLAR ZİRVESİ, Antalya, Turkey, 14 - 17 November 2019

II. TAp73'ün hepatoselüler karsinomada tümör teşvik edici rolü

İŞCAN E., YILDIZ G., Öz Ö., Ekin U., Khoury N., KELEŞ U., KARAKÜLAH G., SUNER KARAKÜLAH A., ÇAKAN AKDOĞAN G., ÖZHAN H. G., et al.

16. Ulusal Tıbbi Biyoloji ve Genetik Kongresi (Uluslararası Katılımlı), Muğla, Turkey, 27 - 30 October 2019

III. TXNIP'xxin HCC gelişimi ve ilerleyişindeki rolü

Güneş A., İŞCAN E., Bağırsakçı E., ÇAKAN AKDOĞAN G., aykutlu u., ŞENTÜRK Ş., ÖZHAN H. G., ERDAL BAĞRIYANIK Ş. E., NART D., Yılmaz Y., et al.

XV.Ulusal Tıbbi Biyoloji ve Genetik Kongresi, Turkey, 26 - 29 October 2017

IV. Thioredoxin interacting protein promotes aggressive phenotypes in hepatocellular carcinoma

Güneş A., İŞCAN E., ÇAKAN AKDOĞAN G., Bağırsakçı E., NART D., YILMAZ BARBET F., ERDAL BAĞRIYANIK Ş. E., ÖZHAN H. G., ATABEY S. N.

FEBS Advanced Lecture Course on Oncometabolism, 18 - 24 June 2017

V. TXNIP overexpression promotes aggressive phenotype in HCC cell lines

Güneş A., İŞCAN E., ÇAKAN AKDOĞAN G., Bağırsakçı E., ÖZHAN H. G., ERDAL BAĞRIYANIK Ş. E., NART D., YILMAZ BARBET F., ATABEY S. N.

EMBO Workshop Metabolic Disorders and liver cancer, 23 - 26 April 2017

Supported Projects

ÖZHAN H. G., Project Supported by Higher Education Institutions, Wnt-reseptör kompleksinin hücre membranı alanlarındaki aktivasyonunun moleküler mekanizmalarının anlaşılması, 2014 - 2017

Metrics

Publication: 45

Citation (WoS): 912

Citation (Scopus): 1035

H-Index (WoS): 14

H-Index (Scopus): 14