

## Asst. Prof. OKTAY İSMAİL KAPLAN

### Personal Information

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### International Researcher IDs

ScholarID: YFzvQUAAAAJ

ORCID: 0000-0002-8733-0920

Publons / Web Of Science ResearcherID: F-8531-2015

Yoksis Researcher ID: 134882

### Education Information

Doctorate, University College Dublin, Conway Institute, Ireland 2007 - 2011

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Using C. Elegans to Investigate Ciliary Protein Transport Into Cilia, University College Dublin, Conway Institute, School Of Biomolecular & Biomed Science, 2011

### Research Areas

Health Sciences, Medicine, Fundamental Medical Sciences, Medical Biology

### Academic Titles / Tasks

Assistant Professor, Abdullah Gul University, Yaşam Ve Doğa Bilimleri Fakültesi, Biyomühendislik Bölümü, 2018 - Continues

Assistant Professor, Abdullah Gul University, Yaşam Ve Doğa Bilimleri Fakültesi, Biyomühendislik Bölümü, 2017 - 2018

### Courses

Fundamentals of Genetics , Undergraduate, 2022 - 2023

Genetics, Undergraduate, 2022 - 2023

Cell and Molecular Biology, Undergraduate, 2021 - 2022

Molecular Basis of Disease, Postgraduate, 2017 - 2018

## Designed Lessons

Kaplan O. İ., Molecular basis of disease , Postgraduate, 2022 - 2023

Kaplan O. İ., Fundamentals of Genetics, Undergraduate, 2022 - 2023

Kaplan O. İ., Genetics, Undergraduate, 2022 - 2023

Ortakçı F., İšođlu İ. A., Kaplan O. İ., BioEngineering Lab I, Undergraduate, 2020 - 2021

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

- I. **Matching variants for functional characterization of genetic variants**  
ÇEVİK KAPLAN S., Zhao P., Zorluer A., Pir M. S., Bian W., KAPLAN O. İ.  
G3: Genes, Genomes, Genetics, vol.13, no.12, 2023 (SCI-Expanded)
- II. **CiliaMiner: an integrated database for ciliopathy genes and ciliopathies**  
Turan M. G., Orhan M. E., ÇEVİK KAPLAN S., KAPLAN O. İ.  
Database : the journal of biological databases and curation, vol.2023, 2023 (SCI-Expanded)
- III. **WDR31 displays functional redundancy with GTPase-activating proteins (GAPs) ELMOD and RP2 in regulating IFT complex and recruiting the BBSome to cilium.**  
Cevik S., Peng X., Beyer T., Pir M. S., Yeniser F., Woerz F., Hoffmann F., Altunkaynak B., Pir B., Boldt K., et al.  
Life science alliance, vol.6, no.8, 2023 (SCI-Expanded)
- IV. **RPI-1 (human DCDC2) displays functional redundancy with Nephronophthisis 4 in regulating cilia biogenesis in C. elegans**  
Kaplan O. İ.  
Turkish Journal of Biology, vol.47, no.1, pp.74-83, 2023 (SCI-Expanded)
- V. **ConVarT: a new search engine for orthologous variants for functional inference of human genetic variants**  
Pir M. S., Bilgin H. I., Sayici A., Coskun F., Torun F. M., Zhao P., Kang Y., ÇEVİK KAPLAN S., KAPLAN O. İ.  
EUROPEAN JOURNAL OF HUMAN GENETICS, vol.30, no.SUPPL 1, pp.504-505, 2022 (SCI-Expanded)
- VI. **ConVarT: a search engine for matching human genetic variants with variants from non-human species.**  
Pir M. S., Bilgin H. I., Sayici A., Coşkun F., Torun F. M., Zhao P., Kang Y., Cevik S., Kaplan O. İ.  
Nucleic acids research, vol.50, 2022 (SCI-Expanded)
- VII. **Environmental responsiveness of tubulin glutamylation in sensory cilia is regulated by the p38 MAPK pathway**  
Kimura Y., Tsutsumi K., Konno A., Ikegami K., Hameed S., Kaneko T., Kaplan O. İ., Teramoto T., Fujiwara M., Ishihara T., et al.  
SCIENTIFIC REPORTS, vol.8, 2018 (SCI-Expanded)
- VIII. **G-quadruplex prediction in E. coli genome reveals a conserved putative G-quadruplex-Hairpin-Duplex switch**  
KAPLAN O. İ., Berber B., Hekim N., Doluca O.  
NUCLEIC ACIDS RESEARCH, vol.44, no.19, pp.9083-9095, 2016 (SCI-Expanded)
- IX. **Active Transport and Diffusion Barriers Restrict Joubert Syndrome-Associated ARL13B/ARL-13 to an Inv-like Ciliary Membrane Subdomain**  
ÇEVİK KAPLAN S., Sanders A. A. W. M., Van Wijk E., Boldt K., Clarke L., van Reeuwijk J., Hori Y., Horn N., Hetterschijt L., Wdowicz A., et al.  
PLOS GENETICS, vol.9, no.12, 2013 (SCI-Expanded)
- X. **Endocytosis Genes Facilitate Protein and Membrane Transport in C. elegans Sensory Cilia**  
KAPLAN O. İ., Doroquez D. B., ÇEVİK KAPLAN S., Bowie R. V., Clarke L., Sanders A. A. W. M., Kida K., Rappoport J. Z., Sengupta P., Blacque O. E.  
CURRENT BIOLOGY, vol.22, no.6, pp.451-460, 2012 (SCI-Expanded)
- XI. **The AP-1 clathrin adaptor facilitates cilium formation and functions with RAB-8 in C. elegans ciliary**

### **membrane transport**

Kaplan O. İ., MOLLA-HERMAN A., Cevik S., GHOSSEUB R., Kida K., KIMURA Y., Jenkins P., Martens J. R., SETOU M., BENMERAH A., et al.

JOURNAL OF CELL SCIENCE, vol.123, no.22, pp.3966-3977, 2010 (SCI-Expanded)

### **XII. Identification of Tubulin Deglutamylase among *Caenorhabditis elegans* and Mammalian Cytosolic Carboxypeptidases (CCPs)**

Kimura Y., Kurabe N., Ikegami K., Tsutsumi K., Konishi Y., KAPLAN O. İ., Kunitomo H., Iino Y., Blacque O. E., Setou M.  
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.285, no.30, pp.22934-22939, 2010 (SCI-Expanded)

### **XIII. Joubert syndrome Arl13b functions at ciliary membranes and stabilizes protein transport in *Caenorhabditis elegans***

ÇEVİK KAPLAN S., Hori Y., KAPLAN O. İ., Kida K., Toivenon T., Foley-Fisher C., Cottell D., Katada T., Kontani K., Blacque O. E.

JOURNAL OF CELL BIOLOGY, vol.188, no.6, pp.953-969, 2010 (SCI-Expanded)

### **XIV. Intraflagellar transport: from molecular characterisation to mechanism**

Blacque O. E., ÇEVİK KAPLAN S., KAPLAN O. İ.

FRONTIERS IN BIOSCIENCE-LANDMARK, vol.13, pp.2633-2652, 2008 (SCI-Expanded)

## **Articles Published in Other Journals**

### **I. Investigating the Impact of Birt-Hogg-Dubé Syndrome Associated Folliculin (FLCN) and Retinitis Pigmentosa 2 (RP2) Loss on Cilia Function and Morphology**

Kaplan O. İ.

Cumhuriyet Science Journal, vol.45, no.2, pp.235-239, 2024 (Peer-Reviewed Journal)

### **II. ConVarT: Search Engine for Missense Variants Between Humans and Other Organisms.**

Pir M. S., Cevik S., KAPLAN O. İ.

Current protocols, vol.2, no.11, 2022 (Peer-Reviewed Journal)

### **III. Protocol for determining the average speed and frequency of kinesin and dynein-driven intraflagellar transport (IFT) in *C. elegans*.**

Turan M. G., Kantarci H., Temtek S. D., Cakici O., Cevik S., KAPLAN O. İ.

STAR protocols, vol.3, no.3, pp.101498, 2022 (Peer-Reviewed Journal)

### **IV. The Joubert syndrome protein CEP41 is excluded from the distal segment of cilia in *C. elegans*.**

Cevik S., Kaplan O. İ.

microPublication biology, vol.2021, no.17912, 2021 (Peer-Reviewed Journal)

### **V. Subcellular localization of the voltage-gated K<sup>+</sup> channel EGL-36, a member of the KV3 subfamily, in the ciliated sensory neurons in *C. elegans*.**

Cevik S., Kaplan O. İ.

microPublication biology, vol.2021, 2021 (Peer-Reviewed Journal)

### **VI. MSABrowser: dynamic and fast visualization of sequence alignments, variations and annotations**

Kaplan O. İ.

Bioinformatics Advances, vol.1, no.", pp.1-4, 2021 (Scopus)

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

### **I. CRISPR Teknikleri ve Biyoteknoloji Alanında Uygulamaları**

KAPLAN O. İ., BERBER B., Aydın C., Tastan C., YILANCIOĞLU K.

Uluslara İVEK Bio Kongresi, 26 - 28 November 2018

### **II. CRISPR Teknolojileri ve Uygulamaları**

KAPLAN O. İ.

V. Uluslararası Katılımlı Deneysel Hematoloji Kongresi, 27 - 29 April 2018

III. **The characterization of ARMC9, a Recently Identified Joubert Syndrome Gene, in Cilia Biogenesis**

Artan E., Çiçek E., KAPLAN O. İ., ÇEVİK KAPLAN S.

International Molecular Biology Congress, 8 - 10 September 2017

IV. **Functional characterization of novel ciliary genes in C. elegans**

Yenisert F., Ateş B., ÇEVİK KAPLAN S., KAPLAN O. İ.

International Molecular Biology Congress, 8 - 10 September 2017

V. **Hunt For Novel Genes Associated With Cilia Biogenesis/Ciliopathy**

ÇEVİK KAPLAN S., Çiçek E., Gümüştöpe İ., KAPLAN O. İ.

Innovation In Medicine Meetings 3, 11 - 13 May 2017

VI. **Uncovering Molecular Barriers to Direct Cell Reprogramming in C elegans**

KAPLAN O. İ.

20 th International C. elegans Meeting, 24 - 28 June 2015

VII. **A forward genetic screen for factors that limit conversion of somatic and germ cells into a Glutamatergic neuron like cell in C elegans**

KAPLAN O. İ.

European C. elegans Meeting, Berlin, Germany, 15 - 17 May 2014

## Supported Projects

KAPLAN O. İ., Project Supported by Higher Education Institutions, Biyoinformatik Yoluyla Elde Edilen Aday Silya Genlerinin Fonksiyonlarının Araştırılması, 2018 - Continues

Kaplan O. İ., Çelik Fuss A., TUBITAK Project, Confirmation of PATL1 Gene as a disease Gene in Fruit Fly and C. elegans Models and Identification of Interaction Partners in Neurons by BioID Method , 2022 - 2024

Kaplan O. İ., TUBITAK Project, Functional Characterization of Joubert Syndrome Associated CEP41; C. elegans mutant generated by CRISPR, 2018 - 2022

Kaplan O. İ., TUBITAK Project, Yeni Silya Genlerinin Ortaya Çıkarılması ve Karakterize Edilmesi Proje Yürütücüsü AK, 2018 - 2021

## Scientific Refereeing

NATURE COMMUNICATIONS, SCI Journal, July 2022

EMBO REPORTS, SCI Journal, June 2022

## Metrics

Publication: 27

Citation (WoS): 459

Citation (Scopus): 437

H-Index (WoS): 7

H-Index (Scopus): 7