

**Office Phone:** [+90 212 383 4627](tel:+902123834627)

**Fax Phone:** [+90 212 383 4625](tel:+902123834625)

**Email:** [alyilmaz@yildiz.edu.tr](mailto:alyilmaz@yildiz.edu.tr)

**Web:** <https://avesis.yildiz.edu.tr/alyilmaz>

#### International Researcher IDs

ScholarID: cY6X2voAAAAJ

ORCID: 0000-0002-8827-4887

Publons / Web Of Science ResearcherID: R-1830-2019

ScopusID: 57067174700

Yoksis Researcher ID: 29465

#### Education Information

---

- I. Doctorate, Ohio State University, The Molecular, Cellular And Developmental Biology Graduate Program, United States Of America 2000 - 2007
- II. Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Science, Department Of Molecular Biology And Genetics, Turkey 1996 - 2000

#### Foreign Languages

---

- I. English, C1 Advanced

#### Advising Theses

---

- I. Yilmaz A., Preimplantation genetic diagnosis in balanced rearrangement carriers and investigation of inter chromosomal effect, Doctorate, Ç.OĞUR(Student), 2023
- II. Yilmaz A., Discovery of Indirect Interactions Between Genes by Deep Learning Using Gene Expression Data, Postgraduate, G.ÇELEN(Student), 2022
- III. Yilmaz A., Survey of expression profiles of circular RNAs and their parent genes in context of tissue specificity, Postgraduate, E.İREM(Student), 2022
- IV. Yilmaz A., Using gene expression profiles of cancer patients with image-based deep learning approach to develop methods for classification and prediction of cancer while revealing critical genes, Postgraduate, B.NUR(Student), 2021
- V. Yilmaz A., Analysis of interplay between gene expression and miRNA expression in breast cancer next generation sequencing data, Postgraduate, S.ARI(Student), 2018
- VI. Yilmaz A., Analysis of biochemical pathway with graph based algorithms, Postgraduate, E.RAVZA(Student), 2018
- VII. Yilmaz A., Analysis of Intra-tumoral Heterogeneity in Context of Tissue Specific Gene Expression with Computational Approach, Postgraduate, H.BÜŞRA(Student), 2018
- VIII. YILMAZ A., İnsan Nöroblastoma Hücrelerinde Metal Uyarıcı Oksidatif Stresle İndüklenen Alzheimer Modeli, Postgraduate, E.KARAMAN(Student), 2017

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

---

- I. **Efficient Storage and Analysis of Genomic Data: A k-mer Frequency Mapping and Image Representation Method**  
Luleci H. B., Yuka S. A., YILMAZ A.  
Interdisciplinary Sciences - Computational Life Sciences, 2024 (SCI-Expanded)
- II. **Biofabrication of Acer palmatum-Mediated Multifunctional CuO Nanoparticles for Dye Removal, Antibacterial-Antifungal Activity, and Molecular Docking**  
Sazak C., ATTAR A., YILMAZ A., ALTIKATOĞLU YAPAÖZ M.  
ACS Omega, vol.8, no.40, pp.36835-36844, 2023 (SCI-Expanded)
- III. **PGT for structural chromosomal rearrangements in 300 couples reveals specific risk factors but an interchromosomal effect is unlikely**  
Ogur C., Kahraman S., Griffin D. K., Cinar Yapan C., Tufekci M. A., Cetinkaya M., TEMEL Ş. G., YILMAZ A.  
Reproductive BioMedicine Online, vol.46, no.4, pp.713-727, 2023 (SCI-Expanded)
- IV. **Effect of SARS-CoV-2 infection on host competing endogenous RNA and miRNA network.**  
Ari Yuka S., Yilmaz A.  
PeerJ, vol.9, no.e12370, 2021 (SCI-Expanded)
- V. **Network based multifactorial modelling of miRNA-target interactions**  
Ari Yuka S., Yilmaz A.  
PEERJ, vol.9, 2021 (SCI-Expanded)
- VI. **Important biological information uncovered in previously unaligned reads from chromatin immunoprecipitation experiments (ChIP-Seq)**  
Ouma W. Z., Mejia-Guerra M. K., YILMAZ A., PAREJA-TOBES P., Li W., Doseff A. I., Grotewold E.  
SCIENTIFIC REPORTS, vol.5, 2015 (SCI-Expanded)
- VII. **Molecular basis for the action of a dietary flavonoid revealed by the comprehensive identification of apigenin human targets**  
Arango D., Morohashi K., Yilmaz A., Kuramochi K., Parihar A., Brahimaj B., Grotewold E., Doseff A. I.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.110, no.24, 2013 (SCI-Expanded)
- VIII. **Unraveling the KNOTTED1 regulatory network in maize meristems**  
Bolduc N., Yilmaz A., Mejia-Guerra M. K., Morohashi K., O'Connor D., Grotewold E., Hake S.  
GENES & DEVELOPMENT, vol.26, no.15, pp.1685-1690, 2012 (SCI-Expanded)
- IX. **A Genome-Wide Regulatory Framework Identifies Maize Pericarp Color1 Controlled Genes**  
Morohashi K., Casas M. I., Falcone Ferreyra L., Mejia-Guerra M. K., Pourcel L., Yilmaz A., Feller A., Carvalho B., Emiliani J., Rodriguez E., et al.  
PLANT CELL, vol.24, no.7, pp.2745-2764, 2012 (SCI-Expanded)
- X. **Thriving under Stress: Selective Translation of HIV-1 Structural Protein mRNA during Vpr-Mediated Impairment of eIF4E Translation Activity**  
Sharma A., Yilmaz A., Marsh K., Cochrane A., Boris-Lawrie K.  
PLOS PATHOGENS, vol.8, no.3, 2012 (SCI-Expanded)
- XI. **AGRIS: the Arabidopsis Gene Regulatory Information Server, an update**  
Yilmaz A., Mejia-Guerra M. K., Kurz K., Liang X., Welch L., Grotewold E.  
NUCLEIC ACIDS RESEARCH, vol.39, 2011 (SCI-Expanded)
- XII. **Genome sequencing and analysis of the model grass Brachypodium distachyon**  
Vogel J. P., Garvin D. F., Mockler T. C., Schmutz J., Rokhsar D., Bevan M. W., Barry K., Lucas S., Harmon-Smoth M., Lail K., et al.  
NATURE, vol.463, no.7282, pp.763-768, 2010 (SCI-Expanded)
- XIII. **Components and Mechanisms of Regulation of Gene Expression**  
YILMAZ A., Grotewold E.  
COMPUTATIONAL BIOLOGY OF TRANSCRIPTION FACTOR BINDING, vol.674, pp.23-32, 2010 (SCI-Expanded)
- XIV. **The word landscape of the non-coding segments of the Arabidopsis thaliana genome**  
Lichtenberg J., Yilmaz A., Welch J. D., Kurz K., Liang X., Drews F., Ecker K., Lee S. S., Geisler M., Grotewold E., et al.  
BMC GENOMICS, vol.10, 2009 (SCI-Expanded)

- XV. **GRASSIUS: A Platform for Comparative Regulatory Genomics across the Grasses**  
Yilmaz A., Nishiyama M. Y., Fuentes B. G., Souza G. M., Janies D., Gray J., Grotewold E.  
PLANT PHYSIOLOGY, vol.149, no.1, pp.171-180, 2009 (SCI-Expanded)
- XVI. **NOD/SCID mouse model of canine T-cell lymphoma with humoral hypercalcaemia of malignancy: cytokine gene expression profiling and in vivo bioluminescent imaging**  
Nadella M. V. P., Kisseberth W. C., Nadella K. S., Thudi N. K., Thamm D. H., McNeil E. A., Yilmaz A., Boris-Lawrie K., Rosol T. J.  
VETERINARY AND COMPARATIVE ONCOLOGY, vol.6, no.1, pp.39-54, 2008 (SCI-Expanded)
- XVII. **RNA helicase A interacts with divergent lymphotropic retroviruses and promotes translation of human T-cell leukemia virus type 1**  
Bolinger C., Yilmaz A., Hartman T. R., Kovacic M. B., Fernandez S., Ye J., Forget M., Green P. L., Boris-Lawrie K.  
NUCLEIC ACIDS RESEARCH, vol.35, no.8, pp.2629-2642, 2007 (SCI-Expanded)
- XVIII. **Retrovirus translation initiation: Issues and hypotheses derived from study of HIV-1**  
Yilmaz A., BOLINGER C., BORIS-LAWRIE K.  
CURRENT HIV RESEARCH, vol.4, no.2, pp.131-139, 2006 (SCI-Expanded)
- XIX. **Coordinate enhancement of transgene transcription and translation in a lentiviral vector**  
Yilmaz A., FERNANDEZ S., LAIRMORE M. D., BORIS-LAWRIE K.  
RETROVIROLOGY, vol.3, 2006 (SCI-Expanded)

#### Articles Published in Other Journals

---

- I. **Balıkesir/Antandros Antik Kenti Kazısı Toprak Örneklerinin Metagenomik Analizi**  
Bal D., Balci B., Yilmaz A., Polat G., Arican E.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.26, no.1, pp.1-12, 2022 (Peer-Reviewed Journal)
- II. **Convolutional Neural Network Approach to Predict Tumor Samples Using Gene Expression Data**  
DARENDELİ KİRAZ B. N., YILMAZ A.  
Zeki sistemler teori ve uygulamaları dergisi (Online), vol.4, no.2, pp.136-141, 2021 (Peer-Reviewed Journal)
- III. **Assessment of Mutation Susceptibility in DNA Sequences with Word Vectors**  
YILMAZ A.  
Zeki Sistemler Teori ve Uygulamaları Dergisi, vol.3, no.1, pp.1-6, 2020 (Peer-Reviewed Journal)
- IV. **POPcorn: An Online resource providing access to distributed and diverse maize project data**  
Cannon E. K., Birkett S. M., Braun B. L., Kodavali S., Jennewein D. M., Yilmaz A., Antonescu V., Antonescu C., Harper L. C., Gardiner J. M., et al.  
International Journal of Plant Genomics, vol.2011, 2011 (Scopus)

#### Refereed Congress / Symposium Publications in Proceedings

---

- I. **A New Network-Based Tool to Analyse Competing Endogenous RNAs**  
Yuka S., Yilmaz A.  
16th International Symposium on Bioinformatics Research and Applications, ISBRA 2020, Moscow, Russia, 1 - 04 December 2020, pp.274-281
- II. **Constructing Accurate Compound Networks for Reliable Network Analysis**  
Alpaydın D., Öztürk R., Yilmaz A.  
12th International Symposium on Health Informatics and Bioinformatics (HIBIT) 2019, İzmir, Turkey, 17 - 18 October 2019, pp.230
- III. **Reduction of Depression Symptoms via the Metabolites of Gut Microbiota**  
Mawaldı I., Yilmaz A.  
12th International Symposium on Health Informatics and Bioinformatics (HIBIT) 2019, İzmir, Turkey, 17 - 18

October 2019, pp.218

- IV. **Automation of Genetic Screening and Reporting with Snakemake**  
Kalyon O., Müslümanoğlu M. H., Yılmaz A.  
12th International Symposium on Health Informatics and Bioinformatics (HIBIT) 2019, İzmir, Turkey, 17 - 18 October 2019, pp.219
- V. **Prediction of Mutation Susceptibility Based on Solely DNA Sequences with Word2Vec**  
Darendeli B. N., Kalyon O., Yılmaz A.  
12th International Symposium on Health Informatics and Bioinformatics (HIBIT) 2019, İzmir, Turkey, 17 - 18 October 2019, pp.222-223
- VI. **Breast cancer gene expression profile analysis in terms of genes specific to non- breast tissues**  
Konuk H. B., Yılmaz A.  
1st International Conference of Genomics and Bioinformatics (ICGB), Aydın, Turkey, 1 - 04 November 2018, pp.30
- VII. **Batch Analysis of RNA-Seq Data with Docker in AWS Cloud**  
Yılmaz A.  
ICAMLS 2018 International Conference on Applied Mathematics, Modeling and Life Science Problems, İstanbul, Turkey, 3 - 05 October 2018, pp.87
- VIII. **What is the relationship between cancer DEGs and tissue specific genes**  
Konuk H. B., Cesur M. R., Yılmaz A.  
Lisansüstü Araştırmalar Sempozyumu ve Tanıtım Günleri, Kocaeli, Turkey, 17 - 18 May 2017
- IX. Öztürk R., Yılmaz A.  
1.Temel Onkoloji Sempozyumu, İzmir, Turkey, 9 - 11 May 2018, pp.30
- X. Darendeli B. N., Al-Qabbani H., Yılmaz A.  
1.Temel Onkoloji Sempozyumu, İzmir, Turkey, 9 - 11 May 2018, pp.48
- XI. **Pinpointing the importance of compounds in human metabolic network**  
Öztürk E. R., Yılmaz A.  
7th International Molecular Biology and Biotechnology Congress, Konya, Turkey, 25 - 27 April 2018, pp.160
- XII. **Multifactorial Modelling of MicroRNA Associated Repression and Its Subsequent Effects on Gene Expression in MicroRNA:Target Network**  
Arı S., Yılmaz A.  
7th International Molecular Biology and Biotechnology Congress, Konya, Turkey, 25 - 27 April 2018, pp.401
- XIII. **RIGOROUS IDENTIFICATION OF TISSUE SPECIFIC GENES IN SILICO: REVEALING THE INTERPLAY BETWEEN CANCER SPECIFIC EXPRESSION AND TISSUE SPECIFIC EXPRESSION**  
KONUK H. B., YILMAZ A.  
International Congress on Advances in Bioscience and Biotechnology, Saraybosna, Bosnia And Herzegovina, 25 - 29 October 2017
- XIV. **GENERATING LOSSLESS COMPRESSION OF GENOME SCALE K-MER FREQUENCY TABLE AS RASTER IMAGE**  
KONUK H. B., YILMAZ A.  
International Congress on Advances in Bioscience and Biotechnology, Saraybosna, Bosnia And Herzegovina, 25 - 29 October 2017
- XV. **IDENTIFICATION of TISSUE SPECIFIC GENES and ASSESMENT of THEIR INTERSECTION WITH DIFFERENTIALY EXPRESSED GENES in CANCER DATA to UNDERSTAND TUMOR HETEROGENEITY IN SILICO**  
Konuk H. B., Cesur M. R., Yılmaz A.  
10 th International Symposium on Health Informatics and Bioinformatics, Güzelyurt, Cyprus (Kkct), 28 June 2017
- XVI. **SURVEY OF CHIMERIC mRNAs IN HIV INFECTED PATIENT RNA-SEQ DATA**  
KALYON O., YILMAZ A.  
10th International Symposium on Health Informatics and Bioinformatics, Güzelyurt, Cyprus (Kkct), 28 June 2017
- XVII. **Prebiotics and Probiotics: Break the 'Self-Domino Effect' for obesity Treatment**  
Özel C., Yılmaz A.  
IVEK 3rd International Convention of Pharmaceuticals and Pharmacies, İstanbul, Turkey, 26 April 2017, pp.338

- XVIII. **Robust and Rigorous Classification of Tissue Specific Genes**  
KONUK H. B., YILMAZ A.  
INTERNATIONAL DNA DAY AND GENOME CONGRESS (IDDGC) 2017, Kırşehir, Turkey, 24 April 2017
- XIX. **Prediction of splice site using AdaBoost with a new sequence encoding approach**  
Pashaei E., YILMAZ A., ÖZEN M., AYDIN N.  
2016 IEEE International Conference on Systems, Man, and Cybernetics, 9 - 12 October 2016
- XX. **A Combined SVM and Markov Model approach for Splice Site Identification**  
Pashaei E., YILMAZ A., Aydini N.  
6th International Conference on Computer and Knowledge Engineering (ICCKE), Mashhad, Iran, 20 - 21 October 2016, pp.200-204
- XXI. **A Novel Method for Splice Sites Prediction Using Sequence Component and Hidden Markov Model**  
Pashaei E., YILMAZ A., Ozen M., AYDIN N.  
38th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Florida, United States Of America, 16 - 20 August 2016, pp.3076-3079
- XXII. **Utilization of Multiple Mapped Sequences in Next Generation Sequencing Especially in Chip Seq Experiments**  
ZOR S., YILMAZ A.  
International Health Informatics and Bioinformatics Symposium, Muğla, Turkey, 16 - 17 October 2015
- XXIII. **Computational Identification of miRNA Targets Using Olive Library**  
Ömeroğlu Ulu Z., ÜN C., ÖZTABAK K. Ö., YILMAZ A., ÖZDEMİR ÖZGENTÜRK N.  
Post-Transcriptional Gene Regulation in Plants, Paris, 10 - 11 July 2015
- XXIV. **Molecular Analysis of Lipid Transfer Gene Selected from Olive Olea europaea ESTs Expressed Sequence Tags Collection**  
Ömeroğlu Ulu Z., ÜN C., ÖZTABAK K. Ö., YILMAZ A., ÖZDEMİR ÖZGENTÜRK N.  
International Symposium on Molecular Chemistry, 18 - 19 December 2014
- XXV. **Construction and Comparison of EST Library for Expressed Genes in Normal and Tumoral Mammary Gland Tissue of the Terrier Dog**  
Ömeroğlu Ulu Z., ÜN C., ÖZTABAK K. Ö., YILMAZ A., ÖZDEMİR ÖZGENTÜRK N.  
International Symposium on Molecular Chemistry, 18 - 19 December 2014
- XXVI. **Design and synthesis of small peptide sequences to detect concentrations of free transition metal ions**  
YÜCESAN G., Yılmaz A., Adıyaman R.  
American Chemical Society, 01 March 2014
- XXVII. **Analyses of EST Collection from Prenatal and Postnatal Mammary Tissue of Sheep**  
Ömeroğlu Ulu Z., ÜN C., ÖZTABAK K. Ö., YILMAZ A., ÖZDEMİR ÖZGENTÜRK N.  
HIBIT 2013 The 8th International Symposium on Health Informatics and Bioinformatics, 25 - 27 September 2013
- XXVIII. **Discovery of regulatory networks in plants by linking promoter and transcription factor databases.**  
YILMAZ A., Palaniswamy S., Davuluri R., Grotewold E.  
Proceedings of the Ohio Collaborative Conference on Bioinformatics, 01 June 2009
- XXIX. **Construction of genomic regulatory encyclopedias: Strategies and case studies**  
Alam M., Bitterman T., Drews F., Ecker K., Elnitski L., Evans S., YILMAZ A., Welch L.  
Proceedings of the Ohio Collaborative Conference on Bioinformatics, 01 June 2009

## Supported Projects

---

- I. Çakır R., Yılmaz A., Çalık H., Arı Yuka S., Maden H., Emergency R&D Project of Group A, Kolorektal Kanserde Çoklu İlaç Direncine Karşı İn Siliko Terapötik Peptit Tasarlanması ve Kitosan Nanopartikülleri ile Etkinliğinin İn Vitro İncelenmesi, 2024 - 2026
- II. YILMAZ A., Project Supported by Higher Education Institutions, İnsan Nöroblastoma Hücrelerinde Metal-Uyarıcı

Oksidatif Stresle İndüklenen Alzheimer Modeli, 2016 - 2017

III. YILMAZ A., BULUT YILGÖR M., ÖZTAŞ E. S., TÜBİTAK Project, Bazı Sonlu Halkalar Üzerinde Tanımlı Ters Sıralı-Tamlama Kodlar Ve DNA\'ya Uygulamaları, 2013 - 2015