

Assoc. Prof. CEYDA KASAVI

Personal Information

Office Phone: [+90 216 777 3566](tel:+902167773566)

Email: ceyda.kasavi@marmara.edu.tr

Web: <https://avesis.marmara.edu.tr/ceyda.kasavi>

International Researcher IDs

ScholarID: FugOmEUAAAAJ

ORCID: 0000-0003-2970-387X

Publons / Web Of Science ResearcherID: GVS-6400-2022

ScopusID: 37050061300

Yoksis Researcher ID: 309576

Biography

Ceyda Kasavi received her Ph.D. degree in Chemical Engineering from Boğaziçi University in 2013 and she is currently working as an Assistant Professor at the Bioengineering Department of Marmara University (Istanbul, Turkey). Her research activities have been focused on systems biology. She has an experience on the development of biological production processes by yeast and extremophiles, the reconstruction and analysis of biological networks to understand the mechanisms behind the cellular processes, the integration and analysis of different omics data, and development of new diagnosis and treatment strategies for complex human diseases by employing systems biology approaches.

Education Information

Doctorate, Bogazici University, Institute Of Science, Chemical Engineering, Turkey 2007 - 2013

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, Turkey 2003 - 2006

Undergraduate, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, Turkey 1998 - 2003

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, A System Based Rational Approach to Improve First and Second Generation Bioethanol Production by *Saccharomyces cerevisiae*, Bogazici University, Institute Of Science, Kimya Mühendisliği, 2013

Postgraduate, Kovalent Bağlanma ve Fiziksel Adsorpsiyon Metotları ile Proteaz Enziminin İmmobilizasyonu, Istanbul Technical University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, 2006

Research Areas

Biotechnology, Life Sciences, Bioinformatics, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Marmara University, Faculty of Engineering, Bioengineering, 2019 - Continues

Courses

Biostatistics, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

System Biology, Postgraduate, 2020 - 2021, 2019 - 2020

Bioconversion of Lignocellulosics, Undergraduate, 2020 - 2021, 2017 - 2018, 2016 - 2017

Bioengineering Project II, Undergraduate, 2020 - 2021

Modern Techniques in Biochemical Engineering , Undergraduate, 2020 - 2021, 2018 - 2019, 2017 - 2018

Bioengineering Principles, Undergraduate, 2020 - 2021, 2019 - 2020

Bioengineering Project I, Undergraduate, 2020 - 2021

Mathematical Applications in Bioengineering Systems, Undergraduate, 2019 - 2020

Regulation of Gene Expression, Doctorate, 2020 - 2021

Biomass and Biorefineries, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Lung Adenocarcinoma Systems Biomarker and Drug Candidates Identified by Machine Learning, Gene Expression Data, and Integrative Bioinformatics Pipeline**
Soyer S. M., ÖZBEK SARICA P., KASAVI C.
OMICS A Journal of Integrative Biology, vol.28, no.8, pp.408-420, 2024 (SCI-Expanded)
- II. **Identifying new molecular signatures and potential therapeutics for idiopathic pulmonary fibrosis: a network medicine approach**
Akca M. N., KASAVI C.
Mammalian Genome, 2024 (SCI-Expanded)
- III. **Exploring COVID-19 Pandemic Disparities with Transcriptomic Meta-analysis from the Perspective of Personalized Medicine**
Kori M., KASAVI C., ARGAS K. Y.
Journal of Microbiology, 2024 (SCI-Expanded)
- IV. **Idiopathic Pulmonary Arterial Hypertension: Network-Based Integration of Multi-Omics Data Reveals New Molecular Signatures and Candidate Drugs**
KASAVI C.
OMICS A Journal of Integrative Biology, vol.27, no.7, pp.315-326, 2023 (SCI-Expanded)
- V. **Gene co-expression network analysis revealed novel biomarkers for ovarian cancer**
KASAVI C.
FRONTIERS IN GENETICS, vol.13, 2022 (SCI-Expanded)
- VI. **Genomic Analysis Provides New Insights Into Biotechnological and Industrial Potential of Parageobacillus thermantarcticus M1**
YILDIZ S. Y., Finore I., Leone L., Romano I., Lama L., KASAVI C., Nicolaus B., TOKSOY ÖNER E., Poli A.
FRONTIERS IN MICROBIOLOGY, vol.13, 2022 (SCI-Expanded)
- VII. **Multimomics Data Integration Identifies New Molecular Signatures for Abdominal Aortic Aneurysm and Aortic Occlusive Disease: Implications for Early Diagnosis, Prognosis, and Therapeutic Targets**
Kori M., Cig D., Argas K. Y., Kasavi C.
OMICS A JOURNAL OF INTEGRATIVE BIOLOGY, vol.26, no.5, pp.1-15, 2022 (SCI-Expanded)
- VIII. **Developments in effective use of volatile organic compound analysis to assess flavour formation during cheese ripening**
Yavuz M., KASAVI C., Oner E. T.

JOURNAL OF DAIRY RESEARCH, vol.88, pp.461-467, 2021 (SCI-Expanded)

- IX. **Process development for the continuous production of heterologous proteins by the industrial yeast, *Komagataella phaffii***
Cankorur-Cetinkaya A., Narraidoo N., Kasavi C., Slater N. K. H., Archer D. B., Oliver S. G.
BIOTECHNOLOGY AND BIOENGINEERING, vol.115, no.12, pp.2962-2973, 2018 (SCI-Expanded)
- X. ***Halomonas smyrnensis* as a cell factory for co-production of PHB and levan**
Tohme S., Haciosmanoğlu G. G., Eroğlu M. S., Kasavi C., Genç S., Can Z. S., Oner E. T.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.118, pp.1238-1246, 2018 (SCI-Expanded)
- XI. **The global transcriptional response of a raw starch-degrading amyolytic *Saccharomyces cerevisiae* strain to oxygen limitation and genetic modification**
Kasavi C., Eraslan S., TOKSOY ÖNER E., KIRDAR B.
TURKISH JOURNAL OF BIOLOGY, vol.40, no.3, pp.684-723, 2016 (SCI-Expanded)
- XII. **An integrative analysis of transcriptomic response of ethanol tolerant strains to ethanol in *Saccharomyces cerevisiae***
Kasavi C., Eraslan S., Oner E., Kirdar B.
MOLECULAR BIOSYSTEMS, vol.12, no.2, pp.464-476, 2016 (SCI-Expanded)
- XIII. **A system based network approach to ethanol tolerance in *Saccharomyces cerevisiae***
Kasavi C., Eraslan S., ARĞA K. Y., Oner E. T., KIRDAR B.
BMC SYSTEMS BIOLOGY, vol.8, 2014 (SCI-Expanded)
- XIV. **Evaluation of industrial *Saccharomyces cerevisiae* strains for ethanol production from biomass**
Kasavi C., Finore I., Lama L., Nicolaus B., Oliver S. G., Oner E. T., KIRDAR B.
BIOMASS & BIOENERGY, vol.45, pp.230-238, 2012 (SCI-Expanded)
- XV. **Identification of candidate genes related to ethanol tolerance in *Saccharomyces cerevisiae* via a systems based modular approach**
Kasavi C., ARĞA K. Y., Oner E. T., KIRDAR B.
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XVI. **Investigating the transcriptional differences of amyolytic *Saccharomyces cerevisiae* strains developed for bioethanol production via a systems based approach**
Kasavi C., Oner E. T., Oliver S. G., KIRDAR B.
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XVII. **Purification, biochemical characterization and gene sequencing of a thermostable raw starch digesting alpha-amylase from *Geobacillus thermoleovorans* subsp *stromboliensis* subsp nov.**
Finore I., Kasavi C., Poli A., Romano I., Oner E. T., KIRDAR B., Dipasquale L., Nicolaus B., Lama L.
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.27, no.10, pp.2425-2433, 2011 (SCI-Expanded)
- XVIII. **Comparison of industrial *Saccharomyces cerevisiae* strains for second generation bioethanol production**
Kasavi C., Finore I., Nicolaus B., Oner E. T., Kirdar B., Oliver S. G.
NEW BIOTECHNOLOGY, vol.25, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **Potential biomarkers for lung adenocarcinoma identified by integrative transcriptomics analysis**
KASAVI C.
Biotech Studies, vol.30, no.1, pp.33-42, 2021 (Peer-Reviewed Journal)
- II. **Use of Agro Waste Biomass for α -Amylase Production by *Anoxybacillus amyolyticus*: Purification and Properties**
Finore I., Di Donato P., Poli A., KIRDAR B., KASAVI C., TOKSOY ÖNER E., Nicolaus B., Lama L.
JOURNAL OF MICROBIAL & BIOCHEMICAL TECHNOLOGY, vol.6, no.6, pp.320-326, 2014 (Peer-Reviewed Journal)

Books & Book Chapters

I. Research and Production of Microbial Polymers for Food Industry

Selvi S. S., Eminagic E., Kandur M. Y., Ozcan E., Kasavi C., Toksoy Öner E.

in: Bioprocessing for Biomolecules Production, Gustavo Molina, Vijai Gupta, Brahma Singh, Nicholas Gathergood, Editor, John Wiley & Sons, West Sussex, UK , New-Jersey, pp.211-238, 2019

Refereed Congress / Symposium Publications in Proceedings

I. Implications of Machine Learning Approaches in Cancer for Biomarker Discovery: Oversampling and Feature Selection

Soyer S. M., Özbek Sarica P., Kasavi C.

5th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2024), Ankara, Turkey, 26 - 28 June 2024

II. Identification of Molecular Signatures and Therapeutic Targets for COVID-19 and PAH through Multiomics Data Integration

Çığ D., Kasavi C.

9th International BAU Drug Design Congress, İstanbul, Turkey, 29 November - 02 December 2023, pp.165

III. MicroRNA-Based Drug Repositioning Revealed Candidate Drugs for Abdominal Aortic Aneurysm

Çığ D., Tutar E., Peker Eyüboğlu I., Kori M., Çelik F. B., Çalışkan M., Erzik C., Yılmaz B., Arga K. Y., Kasavi C.

5th Eurasia Biochemical Approaches & Technologies Congress (EBAT), Antalya, Turkey, 2 - 05 November 2023, pp.68

IV. Molecular Substrates of COVID-19 and Pulmonary Arterial Hypertension Identified Through Signalling Network Construction

Cig D., KASAVI C.

6th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2023), Ankara, Turkey, 11 - 13 October 2023, pp.429

V. Analysis of multi-omics data revealed candidate drugs for COVID-19

Cig D., KASAVI C.

16th International Symposium on Health Informatics and Bioinformatics (HIBIT), Ankara, Turkey, 4 - 06 October 2023

VI. İdiyopatik pulmoner fibrozise yönelik moleküler belirteçlerin sistem biyolojisi yaklaşımları ile belirlenmesi

AKÇA M. N., KASAVI C.

25. Ulusal Biyoloji Kongresi, İzmir, Turkey, 13 - 15 July 2023, pp.199

VII. Identification of common signatures in pulmonary diseases by bioinformatic analysis

KASAVI C.

International Congress of Multidisciplinary Medical and Health Sciences Studies, Ankara, Turkey, 27 May 2023

VIII. Microbial and Enzymatic Production of Halomonas Levan

KIRTEL O., KASAVI C., TOKSOY ÖNER E.

IX. International Fructan Symposium, İstanbul, Turkey, 10 October 2022

IX. Biyoinformatik analizlerle COVID-19 ve pulmoner arteriyel hipertansiyon ile ilişkili aktif modüllerin belirlenmesi

Cig D., KASAVI C.

11. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Online, Turkey, 08 October 2022

X. Differential co-expression network analysis revealed a novel prognostic module in thyroid cancer

KASAVI C.

2nd International Symposium of Scientific Research and Innovative Studies (ISSRIS'22), Online, Turkey, 02 March 2022

XI. A System-based network approach to identify prognostic biomarker candidates for lung

adenocarcinoma

KASAVI C.

4. Uluslararası Erciyes Bilimsel Araştırmalar Kongresi, Kayseri, Turkey, 16 October 2020

XII. Investigation of Transcriptional Response to Ethanol Stress in *Saccharomyces cerevisiae*

KASAVI C., ERASLAN S., TOKSOY ÖNER E., KIRDAR B.

2nd Applied Synthetic Biology in Europe, Malaga, Spain, 25 - 27 November 2013

XIII. A systems based approach to understand transcriptional differences of amyolytic *saccharomyces cerevisiae* strains developed for bioethanol production

Kasavi C., Oner E. T., Kirdar B.

22nd IUBMB Congress/37th FEBS Congress, Sevilla, Spain, 4 - 09 September 2012, vol.279, pp.521-522

XIV. Investigation of the Response to Ethanol Stress in *Saccharomyces cerevisiae*

KASAVI C., TOKSOY ÖNER E., KIRDAR B.

Microbial Stress: from Molecules to Systems (second meeting organized by European Federation of Biotechnology Section on Microbial Physiology), Belgirate, Italy, 10 - 13 May 2012

XV. Genomic Comparison of Ethanol Tolerance Genes of Industrial *Saccharomyces cerevisiae* Strains

KASAVI C., TOKSOY ÖNER E., KIRDAR B.

EMBO (European Molecular Biology Organization) Conference on Comparative Genomics of Eukaryotic Microorganisms: Understanding the Complexity of Diversity, San Feliu de Guixols, Spain, 15 - 20 October 2011

XVI. Systems Based Modular Approach to Analyze Ethanol Tolerance in *Saccharomyces cerevisiae*

KASAVI C., TOKSOY ÖNER E., KIRDAR B.

12th International Conference on Systems Biology, Mannheim, Germany, 28 August - 01 September 2011

XVII. Genomic Comparison of Ethanol Tolerances of Industrial *Saccharomyces cerevisiae* Strains

KIRDAR B., KASAVI C., TOKSOY ÖNER E.

11th International Conference on Systems Biology, Edinburgh, Saint Helena, 10 - 15 October 2010

XVIII. Fermentation Performances of Industrial Yeast Strains in Second Generation Bioethanol Production

KASAVI C., Finore I., Nicolaus B., TOKSOY ÖNER E., KIRDAR B., Oliver S. G.

International Symposium on Biotechnology: Developments and Trends, Ankara, Turkey, 27 - 30 September 2009

XIX. Analysis of Dynamic Expression Profiles Using Pre-processed Quantitative PCR Data

CANKORUR ÇETİNKAYA A., KASAVI C., KIRDAR B.

International Symposium on Biotechnology: Developments and Trends, Ankara, Turkey, 27 - 30 September 2009

Supported Projects

Kasavi C., Soyer S. M., Project Supported by Higher Education Institutions, Glioma Alt Türlerine Özgü Aday Biyobelirteç ve Terapötiklerin Belirlenmesi için Makine Öğrenmesi Yöntemleri, 2024 - 2025

Toksoy Öner E., Kasavi C., Yıldız S. Y., TÜBİTAK International Bilateral Joint Cooperation Program Project, Biyorafineri Yaklaşımları ve Termozimlerle Ksilan İçerikli Biyokütleinin Değerlendirilmesi, 2023 - 2025

Kasavi C., Arğa K. Y., Erzik C., Çalışkan M., Yılmaz B., TÜBİTAK Project, Abdominal aort anevrizmasının erken teşhis ve tedavisine yönelik biyobelirteç ve ilaç adayların belirlenmesi, 2021 - 2023

Orešič M., Gonzalez E., Eerola T., Rousu J., Aldana J., Greiner-Stöffele T., Oliver S., Kasavi C., FP7 Project, BIOLEDGE (BIO knowLEDGE Extractor and Modeller for Protein Production), 2011 - 2015

Kirdar B., TÜBİTAK Project, Kafein Ve Rapamisinin Yaşam Kalitesi Ve Süresi Üzerine Etkilerinin Sistem Bazlı Bir Yaklaşım İle İncelenmesi, 2011 - 2014

Toksoy Öner E., Kirdar B., TÜBİTAK Project, Yüksek Verimli Biyo-Yakıt Üretimi İçin Sistem Bazlı in-silico Model Geliştirilmesi ve Fabrika Hücrelerin Akılcı Tasarımı, 2007 - 2010

Student Project

R & D Project, Polikistik Over Sendromu için Sistem Biyolojisi Yaklaşımı ile Farklı Seviyelerde Biyolojik Moleküller

Üzerinden İlaç Reposizyonu , Marmara University, Faculty of Engineering, Bioengineering, Turkey, 2023 - Continues
R & D Project, Transkriptomik Verilerin Genom-Seviyeli Biyolojik Modeller ile Bütünleşik İncelenmesi Sonucunda
Pulmoner Arteriyel Hipertansiyon Hastalığına Yönelik Biyobelirteç Adaylarının Belirlenmesi, Marmara University, Faculty
of Engineering, Bioengineering, Turkey, 2021 - 2022

Metrics

Publication: 41

Citation (WoS): 132

Citation (Scopus): 205

H-Index (WoS): 6

H-Index (Scopus): 7

Non Academic Experience

Cambridge University