

## Asst. Prof. BURÇAK OTLU SARITAŞ

### Personal Information

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### International Researcher IDs

ScholarID: KWXbqQ8AAAAJ

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Publons / Web Of Science ResearcherID: AGV-0182-2022

ScopusID: 14523187700

Yoksis Researcher ID: 163907

### Education Information

Post Doctorate, University of California, San Diego, Department of Cellular and Molecular Medicine, Department of Bioengineering, United States Of America 2018 - 2022

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey 2010 - 2017

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey 1999 - 2002

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey 1995 - 1999

### Research Areas

Computer Sciences, bioinformatics, Artificial Intelligence, Computer Learning and Pattern Recognition, Engineering and Technology

### Advising Theses

OTLU SARITAŞ B., Rankpcsf: A disease module identification method by integrating network propagation with prize-collecting steiner forest, Postgraduate, A.ESKİN(Student), 2022

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

#### I. Geographic variation of mutagenic exposures in kidney cancer genomes

Senkin S., Moody S., Díaz-Gay M., Abedi-Ardekani B., Cattiaux T., Ferreiro-Iglesias A., Wang J., Fitzgerald S., Kazachkova M., Vangara R., et al.

Nature, vol.629, no.8013, pp.910-918, 2024 (SCI-Expanded)

#### II. DNA damage and somatic mutations in mammalian cells after irradiation with a nail polish dryer

Zhivagui M., Hoda A., Valenzuela N., Yeh Y., Dai J., He Y., Nandi S. P., OTLU SARITAŞ B., Van Houten B., Alexandrov L. B.

- NATURE COMMUNICATIONS, vol.14, no.1, 2023 (SCI-Expanded)
- III. **Topography of mutational signatures in human cancer**  
 OTLU SARITAŞ B., Díaz-Gay M., Vermes I., Bergstrom E. N., Zhivagui M., Barnes M., Alexandrov L. B.  
*Cell Reports*, vol.42, no.8, 2023 (SCI-Expanded)
- IV. **Genomic and evolutionary classification of lung cancer in never smokers**  
 Zhang T., Joubert P., Ansari-Pour N., Zhao W., Hoang P. H., Lokanga R., Moye A. L., Rosenbaum J., Gonzalez-Perez A., Martinez-Jimenez F., et al.  
*NATURE GENETICS*, vol.53, no.9, pp.1348-1375, 2021 (SCI-Expanded)
- V. **The genomic and epigenomic evolutionary history of papillary renal cell carcinomas**  
 Zhu B., Poeta M. L., Costantini M., Zhang T., Shi J., Sentinelli S., Zhao W., Pompeo V., Cardelli M., Alexandrov B. S., et al.  
*NATURE COMMUNICATIONS*, vol.11, no.1, 2020 (SCI-Expanded)
- VI. **Characterizing Mutational Signatures in Human Cancer Cell Lines Reveals Episodic APOBEC Mutagenesis**  
 Petljak M., Alexandrov L. B., Brammell J. S., Price S., Wedge D. C., Grossmann S., Dawson K. J., Ju Y. S., Iorio F., Tubio J. M. C., et al.  
*CELL*, vol.176, no.6, pp.1282-1314, 2019 (SCI-Expanded)
- VII. **JOA: Joint Overlap Analysis of multiple genomic interval sets**  
 Otlu B., Can T.  
*BMC BIOINFORMATICS*, vol.20, 2019 (SCI-Expanded)
- VIII. **GLANET: genomic loci annotation and enrichment tool**  
 Otlu B., Firtina C., Keles S., Tastan O.  
*BIOINFORMATICS*, vol.33, no.18, pp.2818-2828, 2017 (SCI-Expanded)
- IX. **Integromic Analysis of Genetic Variation and Gene Expression Identifies Networks for Cardiovascular Disease Phenotypes**  
 Yao C., Chen B. H., Joehanes R., Otlu B., Zhang X., Liu C., Huan T., Tastan O., Cupples L. A., Meigs J. B., et al.  
*CIRCULATION*, vol.131, no.6, pp.536-746, 2015 (SCI-Expanded)
- X. **Relative consistency of projective reconstructions obtained from the same image pair**  
 Otlu B., Atalay M. V., Hassanpour R.  
*INTERNATIONAL JOURNAL OF PATTERN RECOGNITION AND ARTIFICIAL INTELLIGENCE*, vol.20, no.5, pp.649-663, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Uncovering novel mutational signatures by de novo extraction with SigProfilerExtractor**  
 Islam S. A., Díaz-Gay M., Wu Y., Barnes M., Vangara R., Bergstrom E. N., He Y., Vella M., Wang J., Teague J. W., et al.  
*Cell Genomics*, vol.2, no.11, 2022 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Prediction of Non-coding Driver Mutations Using Ensemble Learning**  
 Basharat S., Huseynov R., Kilinc H. H., OTLU SARITAŞ B.  
 2023 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), Ankara, Turkey, 05 December 2023, pp.2960-2966
- II. **Machine Learning Insights into the Impact of Breast Cancer Mutations on miRNA Targets**  
 OTLU SARITAŞ B., Taşbaş M. N.  
 16th International Symposium on Health Informatics and Bioinformatics, Ankara, Turkey, 04 October 2023
- III. **Perturbations of Transcription Factor Binding Sites in Breast Cancer**  
 OTLU SARITAŞ B., Hilmi Kılıç H.

## Metrics

Publication: 14

Citation (WoS): 480

Citation (Scopus): 578

H-Index (WoS): 7

H-Index (Scopus): 8

## Congress and Symposium Activities

Structural and Functional Genomics Program Annual Retreat, Panelists, California, United States Of America, 2022

Cancer Grand Challenges Scientific Forum, Panelists, Cambridge, United Kingdom, 2022

NCI Symposium on Mutation Signatures and Cancer, Panelists, California, United States Of America, 2021

## Invited Talks

Structural and Functional Genomics Program Annual Retreat, Seminar, University of California, San Diego, Moores

Cancer Center,, United States Of America, March 2022