

RÜÇHAN EKREN

Currently PhD student in Bioinformatics with the expected thesis manuscript submission of June 2023. Mainly working on scRNAseq data curation and its robust analysis.



EDUCATION

Current
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2020



Bioinformatics, Genomics and Systems Biology

Paul Sabatier University of Toulouse III

📍 Toulouse, FR

- PhD Candidate
- Thesis: The Alterations of Transcriptomic Program of Natural Killer Cells in the Tumor Microenvironment of Multiple Myeloma

2020
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2017



Biostatistics and Bioinformatics

Acibadem University

📍 Istanbul, TR

- Master of Science
- Thesis: Transcriptomics-based Investigation of Drug Resistance Mechanisms in Triple-negative Breast Cancer Cell Lines

2016
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2011



Molecular Biology & Genetics

Izmir Institute of Technology

📍 Izmir, TR

- Bachelor of Science



RESEARCH EXPERIENCE

Current
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2020



Bioinformatics Analyst

GENIM - CRCT

📍 Toulouse, FR

- Establishing robust, end-to-end scRNAseq analysis pipeline with improved QC steps involved
- Being in charge of orchestration of 40 human scRNAseq samples and complementary 4 mouse scRNAseq samples
- Characterization of corresponding cell types with supervised and unsupervised approaches within cohort
- Functional analyses such as differential expression, overrepresentation analysis, pathway enrichment, and trajectory inference analyses



CONTACT

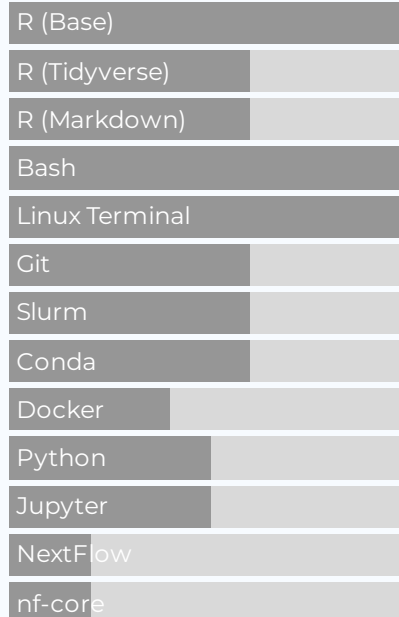
✉ ruchanekren@gmail.com

🌐 <https://github.com/rekren>

🐦 <https://twitter.com/RuchanEkren>

/RuchanEkren

TECHNICAL CAPABILITIES



2020
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2017



Graduate Research Assistant

Sezerman Bioinformatics Lab

📍 Istanbul, TR

- Transcriptome Profile Analysis of Atherosclerosis Rabbit Model from pooled CEL-Seq2 Data
- Investigation of miRNA Activity-related Mechanisms of Drug Resistance on Breast Cancer Patients from RNA-Seq data
- Transcriptomics Analysis of Insulin-resistant Rat Model from Microarray data

2016
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2015



Research Assistant

JLab Bioinformatics

📍 Izmir, TR

- Processing publicly available NGS data from "1000 Genome project" to find alternative explanations of cancer causes
- Sequential mapping of genomic reads to human reference genome, bacteria genome pool and then viral genome pool

2015
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2012



Undergraduate Researcher

Controlled in vitro Microenvironments Lab

📍 Izmir, TR

- Optimization of PDA liposome embedded assay with breast cancer cell laden
- Fabrication of the polydiacetylene (PDA) / polyvinylalcohol (PVA) electrospun mats for cell culture applications
- Lab-on-a-chip biosensor development for rapid bacteria detection

2014



Visiting Researcher

Internal Medicine Lab - Universitätsklinikum

📍 Tübingen, GR

- Disruptive Effect of Dietary Ethanol Stimulation on Cholangiocarcinoma cells



TEACHING EXPERIENCE

2020
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2018



Omics

Acibadem University

📍 Istanbul, TR

- Teaching Assistant
- Detailed theoretical explanation of RNA-Seq, data analysis pipeline and hands-on experience with supervised term projects
- Undergraduate class to medicine students

- 2018 ● **RNA-Seq Analysis** 📍 Istanbul, TR
Acibadem University
- Within the framework of EpiSyStem (Epigenetics and System Biology of Stem cells and Reprogramming) of H2020:Marie Curie Innovative Training Networks
 - Handled the organization and being teaching assistant of the workshop
 - With the focus of how to leverage RNA-seq data, its analysis and practical applications











PUBLISHED ARTICLES

- 2022 ● **CD137(4-1BB) Signaling Drives a TcR-Independent Exhaustion Program in CD8 T Cells**
Immunity -Preprint-
• https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4163142/
- 2020 ● **High-throughput profiling reveals perturbation of endoplasmic reticulum stress-related genes in atherosclerosis induced by high-cholesterol diet and the protective role of vitamin E**
Biofactors
• <https://pubmed.ncbi.nlm.nih.gov/32384218/>
- 2020 ● **Response Assessment With Molecular Characterization of Circulating Tumor Cells and Plasma MicroRNA Profiling in Patients With Locally Advanced Breast Cancer During Neoadjuvant Chemotherapy**
Clinical Breast Cancer
• <https://pubmed.ncbi.nlm.nih.gov/32201164/>
- 2020 ● **Transcriptomics-based Investigation of Drug Resistance Mechanisms in Triple-negative Breast Cancer Cell Lines**
Master Thesis
• <https://scholar.google.com/scholar?oi=bibs&cluster=3352258660366913413&btnI=1&hl=en>
- 2018 ● **Ameliorative potential of Lavandula stoechas in metabolic syndrome via multitarget interactions**
Journal of Ethnopharmacology
• <https://pubmed.ncbi.nlm.nih.gov/29729383/>



SELECTED CONFERENCES AND SEMINARS

- 2022 ● **CARe Bionformatics Workshop**
Amphitheatre Oncopole  Toulouse, FR
• Selected to give scientific talk about my current project by scientific committee.
- 2022 ● **NextflowSummit 2022**
Virtual Event  Barcelona, SP
- 2021 ● **Network Science in Biology and Medicine (NetBioMed)**
Virtual Event  Washington DC, USA
• Presented scientific poster about my current project
- 2021 ● **Les Journées Ouvertes en Biologie, Informatique et Mathématiques (JOBIM)**
Institut Pasteur, Virtual Event  Paris, FR
• Presented scientific poster about my current project
- 2021 ● **Computational Systems Biology of Cancer: Multi-omics and Machine Learning Approaches (SysBioCancer)**
Institut Curie, Virtual Event  Paris, FR
• Selected for doing oral presentation about my current project by scientific committee
- 2021 ● **Combination in cancer immunotherapy resistance, from molecular aspects to clinical issues (CICOR)**
Amphitheatre Oncopole  Toulouse, FR
• Selected for giving a scientific talk about my current project by scientific committee
- 2021 ● **Single-cell Genomics Day**
Virtual Event  New York, USA
- 2021 ● **Computational Genomics. A Hands-on Course on Machine Learning for Genomics**
Virtual Bootcamp, Max Delbrück Center  Berlin, GR

EXTRA-CURRICULUM ACTIVITIES

- Current
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2023 ● **International Society for Computational Biology (ISCB)**
• Student member

I also enjoy reading fictional literature, playing story-rich role-playing video games, and doing woodcarving in my free time.

- Current | 2022 • **COMmtee ETudiant (COMET)**
 - Responsible for the organization of joournal clubs, workshops and other events for the students of CRCT
- Current | 2021 • **Société Française de Bioinformatique (SFBI)**
 - Student member
- Current | 2021 • **European Association for Cancer Research (EACR)**
 - Student member
- Current | 2021 • **CARe Training Council**
 - In charge of preparing the prospective members of the Cancer, Aging, and Rejuvanation (CARe) Graduate School
- Current | 2021 • **Hope Foundation for Children with Cancer (KACUV)**
 - Volunteer and donor of the foundation
- 2020 | 2018 • **Tutorship**
 - Volunteered tutorship for middle schoold kids on scince and math courses

This CV is made with the R packages [pagedown](#) and [datadrivencv](#).

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