## Arsham Mikaeili Namini

#### Curriculum Vitae

Montréal, Canada — arsham.mikaeilinamini@mail.mcgill.ca — (438) 470-0724 Google Scholar — GitHub — Linkedin

#### **EDUCATION**

#### M.Sc. in Human Genetics

2023 - 2026(Expected)

Department of Human Genetics, Faculty of Medicine and Health Science

McGill University, Montréal, QC, Canada

## B.Sc. in Biology

2019 - 2023

Department of Animal Biology, Faculty of Biological Science

Kharazmi University, Tehran, Tehran Province, Iran

GPA: 3.75 / 4.00

#### Diploma of Natural Sciences

2014 - 2018

Shahid Soltani 1 High School

National Organization for Development of Exceptional Talents, Karaj, Alborz Province, Iran

GPA: 4.00 / 4.00

## RESEARCH EXPERIENCE

#### Research Assistant

August 2023 - Present

Supervisors: Hamed S. Najafabadi, Ph.D., Yasser Riazalhosseini, Ph.D.

Department of Human Genetics

Faculty of Medicine and Health Science, Montréal, QC, Canada

Investigating alternative splicing mechanisms in different cancer types and establishing a statistical framework for mRNAs isoforms quantification using scRNA-Seq data.

# Research Fellow

June 2022 - June 2023

Supervisor: Abolfazl Movafagh, Ph.D.

Department of Medical Genetics

Shahid Beheshti University of Medical Sciences, Tehran, Tehran Province, Iran

An in-silico investigation on mRNAs and lncRNAs deregulation in metastatic small cell lung cancer and revealing potential biomarker for brain metastatic SCLC. Project Details

#### Research Assistant

August 2021 - June 2023

Supervisor: Youping Deng, Ph.D.

Department of Quantitative Health Sciences

University of Hawaii at Mānoa, Honolulu, HI, USA

Tracking mutation patterns on a whole-genome scale of 6 million COVID-19 samples and studied region-specific mutations to demonstrate the achievement rate of different vaccine types.

## Teacher Assistant

May 2022 - August 2022

Systems Biology of the Next Generation Company (SBNGC), Tehran, Tehran Province, Iran

Teaching an introduction to R programming, statistical frameworks, and essential packages for NGS data analysis.

# Lab Intern

July 2021 - July 2021

Department of Stem Cell Biology

Royan Institute, Tehran, Tehran Province, Iran

A three-week internship focused on essential laboratory skills for research purposes, including MEF cell culture and cryobiology techniques. Histotechnique and slide preparation and female embryology surgery techniques.

## **PUBLICATIONS**

# Peer Reviewed Articles

An in silico comparative transcriptome analysis identifying hub lncRNAs and mRNAs in brain metastatic small cell lung cancer (SCLC)

**Arsham Mikaeili Namini**, Motahareh Jahangir, Maryam Mohsen, Ali Asghar Kolahi, Hossein Hassanian-Moghaddam, Zeinab Mazloumi, Marzieh Motallebi, Mojgan Sheikh- pour, Abolfazl Mobafagh\*. Scientific Reports. 10.1038/s41598-022-22252-7

## Comparative analysis of protein-protein interaction networks in metastatic breast cancer

Hozhabri, Roxana Sadat Ghasemi Dehkohneh, Seyed Morteza Razavi, S. Mostafa Razavi, Fatemeh Salarian, Azade Rasoul, Jalil Azami, Melika Ghasemi Shiran, Zahra Kardan, Negar Farrokhzad, **Arsham Mikaeili Namini**, Ali Salari\*. PLoS ONE. 10.1371/journal.pone.0260584

## **Pre Prints**

# The First Geographic Identification by Country of Sustainable Mutations of SARS-COV2 Sequence Samples: Worldwide Natural Selection Trends

Mohammadamin Mahmanzar, Taleb Hoseini, Karim Rahimian, **Arsham Mikaeili Namini**, Shahrzad Ahangarzadeh, Reza Mahmanzar, Youping Deng\*. BioRxiv. 2022.07.18.500565/10.1101

# AWARDS AND HONORS

#### Grad Excellence Award

2023

McGill University, Montréal, QC, Canada

#### **Exceptional Talent Award**

2022

Kharazmi University, Tehran, Tehran Province, Iran

Qualified for every M.Sc. program in biological sciences field in any Iranian university.

# PROFESSIONAL SKILLS

#### **Programming**

Advanced R and Python programming with a focus on developing genomics and transcriptomics computational tools. Familiar with Unix/Linux machines and bash scripting. Advanced user of git version control system. Familiar with web programming using javascripts frameworks (React and Vue) and HTML/CSS scripting.

# **Bioinformatic Tools**

Familiar with some of the widely used bioinformatic tools like BLAST, Oligo 7, SPSS, QUAST, MEME, SPAdes assembler, Bioedit, pyMOL, VMD, IGV, Cytoscape, and Galaxy.

#### Wet Lab Skills

DNA extraction, cDNA synthesis, PCR (regular and RT), primer design, gel electrophoresis (regular and 2D), gel documentation, CR-Seq, and DNA purification.

# General Tools

Adobe Illustrator, Figma, Adobe InDesign, Inkscape, Final Cut Pro, Endnote, Mendeley, Slack, Notion, and Overleaf.

# **CERTIFICATES**

#### Bioinformatics Specialization (7 Courses)

University of California San Diego, San Diego, CA, USA Validation

## Introduction to Genomic Technologies and Python for Genomic Data Science

Johns Hopkins University, Baltimore, MD, USA

Validation, Validation