Sajedeh Masjoudi

MSc, Biology-Genetics, 2015

BSc**,** Biology, 2010; Islamic Azad University, Science and Research branch, Tehran

Cell Phone: +98-9124471754

Email: Smasjoodi07@gmail.com

Background

I had a strong interest in experimental sciences and the biological sciences from elementary school. I started my university education in biology. Then I started working in Medical Lab. In this time I was interested to the Genetics. Therefore, For MSc, I studied Genetics by focusing in familial disease genetic. Furthermore, I passed some advanced courses of Computer science and Biology such as bioinformatics, genetics (GWAS, NGS).

Research/Work experience

- Aghdasieh Medical laboratory - Pathology & Genetics Center - Laboratory Assistant
- Research Institute for Endocrine Sciences Shahid Beheshti University of Medical Sciences Tehran, Iran - Laboratory Assistant, Collaboration in different projects
- Genoscope Diagnostic Company – NGS based Genetic tests and genetic counseling services – Supervisor

Publications

- Performance of Illumina Next Generation Sequencing (Pathobiology Research. 2018; 21(3):153-161)
- Chromosomal regions strongly associated with waist circumference and body mass index in metabolic syndrome in a family-based study (Scientific Reports. 2021;11(6082):1-7) PMID: 33727680
- Low HDL concentration in rs2048327-G carriers can predispose men to develop coronary heart disease: Tehran Cardiometabolic genetic study (TCGS) (Gene. 2021;778(145485)) PMID: 33581269
- Kernel machine SNP set analysis finds the association of BUD13, ZPR1, and APOA5 variants with metabolic syndrome in Tehran Cardio-metabolic Genetics Study (Scientific Reports. 2021;11(10305)) https://doi.org/10.1038/s41598-021-89509-5

Presentation and Conference Proceeding

• The European Human Genetics Conference 2019: Presented Poster (June 2019)

"Application of whole-exome sequencing in daily practice: reducing the cost, diagnostic odyssey, increasing the diagnostic rate"

• The European Human Genetics Conference 2016: Accepted Poster (May 2016)

"Association of FTO Gene variants with Metabolic Syndrome risk factors in

Tehran cardio-metabolic study (TCGS)"

• The European Human Genetics Conference 2016: Presented Poster (May 2016)

“High prevalence of monogenic familial hypercholesterolemia in a population based study needs deep genetic dissection”

• The European Human Genetics Conference 2016: Presented Poster (May 2016)

“Admixture Analysis between allelic effect and HDL-C concentration related to metabolic syndrome (MetS) in Tehran cardio-metabolic genetic study (TCGS)”

• The 8 th International & 13 th National Congress on Quality Improvement in Clinical: Presented Poster (2015)

“Laboratories Next Generation Sequencing in Genome: Illumina Method”

Conferences

- The European Human Genetics Conference 2019
- 3rd International Congress of Iranian Personal Medicine 2019
- The European Human Genetics Conference 2016
- The 8 th International & 13 th National Congress on Quality Improvement in Clinical 2015

Attended as lecture in training course entitled

- Application of Next Generation Sequencing in Clinical Diagnosis of inherited disorders (Iranian Molecular Medicine Network and Kawsar Human Genetics Research Center (2019))
- Application of Next Generation Sequencing in Clinical Diagnosis of inherited disorders (Iranian Molecular Medicine Network and Kawsar Human Genetics Research Center (Dec,2019))

TECHNICAL SKILLS/ Genetics Lab

PCR methods, Electrophoresis nucleic acids analysis (Agarose, Poly Acrylamid) and UV spectrophotometer analysis of DNA, “Ethidium bromide and gel red” Staining, Extraction and purification DNA, DNA banking, Nanodrope.

Bioinformatics and Statics SKILLS

- Designing of Primers for different PCR based methods such as tetra-ARMS PCR primers…
- Extract data of ONLINE SOFTWARE, DATABASES and SITES
  - International HapMap Project, Genome 10K Project, UCSC Genome Bioinformatics Browser, Ensemble(Vep), Genome Aggregation Database (gnomAD), Clinvar, Intervar-Genetic variant interpretation, RefSeq Gene, Online Mendelian Inheritance in Man (OMIM), VarSome, Galaxy…
- Teaching the Database variants to new researchers
- NGS analysis for diagnosis

Computer skills

Statistical Software

- Linux
- Some software for NGS study like as Samtools, Bam tools, Integrative Genomics Viewer (IGV), Anovvar, Genome Analysis Toolkit (GATK), PLINK
- R / RStudio
- SPSS

Genetic Software

- PROGENY
- GeneRunner
- Finch TV

other

- Endnote
- Competent with most of Microsoft Office programmers (word, excel, PowerPoint, access)
- Photoshop
- Some knowledge about HTML

Education Courses

• Looks for research: from information gathering to effective presentation (Cellular Molecular and Endocrine Research Center, Research Institute for Endocrine Sciences (2013)

• From gene selection to PCR design with bioinformatics database

(Cellular Molecular and Endocrine Research Center, and Iranian Molecular Medicine Network (2014)

• PCR and Electrophoresis Summer School (Cellular Molecular and Endocrine Research Center (2014)

• Introduction to Progeny software 7(Cellular Molecular and Endocrine Research Center, And Iranian Molecular Medici cine Network (2014)

• Concept of genome wide association studies and their importance (GemIran Genetic Research group and Personalized Medicine Congress (2019))

• Application of Next Generation Sequencing in Clinical Diagnosis (Personalized Medicine Congress and Kawsar Human Genetics Research Center (2019))

• Programming with R and its application in Genomewide Association Analysis (GWAS) (GemIran Genetic Research group and Iranian Molecular Medicine Network (2019))

• Clinical genomics and NGS (At the ESGM remote training center in IRAN (2019))

• Preliminary and Advanced Research Methodology (Research Institute for Endocrine Sciences (2019)

• Peer review for scientific articles (Research Institute for Endocrine Sciences (2019)