MARIA BOUSALI

Biologist, Bioinfomatician - Computational Biologist

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10/04/1995

i Citizenship: Greek



EDUCATION

Ph.D. Candidate in Genomics - Bioinformatics

Medical School, University of Athens (UoA)

Unit of Bioinformatics & Applied Genomics, Hellenic Pasteur Institute

MSc Epidemiology - Research Methodology - Public Health

Medical School, UoA

Grade: 9.26/10, "Excellent" («ΑΡΙΣΤΑ»)

MSc Bioinformatics - Computational Biology

Biology Department, School of Sciences, UoA

Biology Degree

Biology Department, School of Sciences, UoA

09/2021 - Today

Athens, GR

09/2021 - 03/2024

Athens, GR

10/2018 - 09/2020

Athens, GR Grade: 9.03/10, "Excellent" («ΑΡΙΣΤΑ»)

09/2013 - 09/2018

Athens, GR Grade: 7.03/10, "Very Good" («ΛΙΑΝ ΚΑΛΩΣ»)

RESEARCH EXPERIENCE

Hellenic Pasteur Institute

09/2020 - Today

Early Stage Researcher/PhD Candidate (Bioinformatics & Applied Genomics Unit)

Athens, GR

- > Investigating the degree of contribution of hepatitis B viral (HBV) integration sites to the development of chronic hepatitis and hepatocellular carcinoma through NGS and bioinformatics approaches
- > Development of bioinformatic algorithms for viral integrations identification from multi-omics datasets
- Development of machine learning algorithms to identify genomic patterns and genomic variation signatures
- > Development of metagenomics pipelines
- > Algorithms development for the identification of Molecular Transmission Clusters (MTCs) from phylogenetic trees
- Phylogenomic, phylodynamic and phylogeographic analysis in HBV, SARS-CoV-2 and HIV molecular data

NCSR "Demokritos" 09/2020 - 04/2021

Molecular Biologist in the Research & Development Department (R&D) (Nanoplasmas Spin-off Company)

Athens, GR

> Development of a lab-on-chip molecular diagnostics for SARS-COV-2 for Point-of-Care use

Hellenic Pasteur Institute

06/2019 - 09/2020

Athens, GR

- > Development of bioinformatic algorithms for the analysis of retrotransposable elements with emphasis on endogenous retroviruses (ERVs) - in the human genome
- > Analysis of the distribution of HERVs integrations in autoimmune disease and cancer patient genomes using Whole Genome Sequencing (WGS) data obtained from genome databases

Biology Department, School of Sciences, UoA

Research Fellow (Bioinformatics & Applied Genomics Unit)

Undergraduate Research (Section of Genetics Biotechnology)

06/2016 - 09/2018

Athens, GR

- > Wet-lab protocols development for the genetic transformation of fungi
- > Construction of genetically recombinant bacterial plasmids through molecular approaches

LANGUAGE SKILLS

English (C2) French (B2)



TEXT & IMAGE ANALYSIS SKILLS

MS Office, LibreOffice Latex Adobe PhotoShop, Inkscape



PROGRAMMING SKILLS

R Unix-Bash C, C++, SQL HTML5, JS, Perl Python, Matlab Git Nextflow Java

