



Curriculum vitae et studiorum Lucas Moron Dalla Tor

Personal Infos

First Name: Lucas

Last Name: Moron Dalla Tor

Date of birth: 6th February 1991

E-mail: lucas.morondallator@univr.it (University)

E-mail2: l.moron@ticali.it (Personal)

Mobile Phone: (+39) 3393572002

Languages: Italian (Native), English (Upper intermediate)

Research experiences

From 5th Oct 2018 to 15th Mar 2019:

Visiting Graduate Researcher in Dr. Matteo Pellegrini's lab in the department of Molecular, Cell and developmental biology at UCLA. Working on methylome data analysis from targeted bisulfite sequencing

From 1st Oct 2017 to present:

PhD in Applied Health and Life Sciences at the University of Verona¹ under the supervision of Professor Giovanni Malerba.

Currently working on WGBS analyses in autoimmune diseases and transcriptomics of parasitic nematodes.

From 28th Feb 2017 to 31st Jul 2017:

Internship at the University of Verona¹ under the supervision of Professor Giovanni Malerba.

During this internship my work focused on exomes and transcriptomes analyses, bacterial genome assembly (reference based and de-novo) and transposable elements analysis in bacteria.

From 24th Oct 2016 to 27th Feb 2017:

Winner of a 3 months post degree grant funded by the Cariverona association to work on a project involving the study of haplotypes and pathogenic risk of NGS detected genetic variants.

From 1st Nov 2014 to 31st Jan 2015:

Internship at the University of Verona¹ under the supervision of Professor Donato Zipeto and PhD Michela Serena.

During this internship I worked on two different projects. First I worked on the development of an anti-tumor chimeric monoclonal antibody, then I spent the rest of my

¹ Department of Neuroscience, biomedicine and movement sciences

internship developing a protocol to study the interactions between HIV-1 and human proteins during infection and replication using CRISPR/Cas9.

Education

From 1st Sep 2016 to 21st Oct 2016:

Java Developer course organized by Umana Forma S.R.L.

8th Jul 2016:

Master's degree in Bioinformatics and medical biotechnology at the University of Verona².

Title of the thesis:

"CRISPR/Cas9: A new tool for Genome Editing applied to the study of the Interactions between Viral and Host Cell Proteins".

Tutor: Prof. Donato Zipeto;

Examiners: Prof. Davide Gibellini, Prof. Tiziana Pandolfini.

Grade: 103/110

19th Mar 2014:

Bachelor's degree in Bioinformatics at the University of Verona³.

Title of the thesis:

"Pattern Recognition's methods for the characterization of brain areas involved in first psychotic events".

Tutor: Prof. Manuele Bicego;

Co-Tutor: Prof. Umberto Castellani.

Grade: 99/110

Jul 2010:

High School diploma in information technology at the I.T.I.S. "*Carlo Zuccante*" in Mestre (VE).

Grade: 76/100

Bio-informatic knowledge

Programming languages (level)

- Java (Intermediate)
- Matlab script (Good)
- Python (Good)
- C/C++ (Good)
- BioJava (Beginner)
- BioPython (Beginner)
- Matlab Bioinformatic Toolbox (Beginner)

² Department of Biotechnology

³ Department of Informatics

- R script (Intermediate)

Great knowledge of unix bash commands and scripting language.

Good knowledge of Pattern recognition's approaches to clustering, detection and classification (KNN, SVC, ...) along with pre-processing (PCA, LDA, ICA, feature selection,...) and post-processing techniques.

Good knowledge of Database development and management using JSP, Servlets and Java Data Beans. XML for database structural design (using DTD or Schemas).

Intermediate knowledge of structural computational biology approaches to molecular dynamics, molecular docking and protein structure prediction.

Great knowledge of the most important databases such as NCBI, EBI, Swiss-Prot, GeneOntology, OMIM, KEGG, GeneCards, dbSNP, etc...

Good knowledge of Genomics, Transcriptomics and methylomics going from pre-processing (reads quality control, adapters removal, dynamic trimming) to mapping (bowtie2, tophat2, bwa, hisat2, GATK, bismark Bsmmap, STAR) to variant calling, coverage and differential analyses (DeSeq2, methylKit, DMRfinder, DSS,...).

Verona ,13th May 2019