

# Ludovica Celli

## CONTACTS

E-mail

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## EDUCATION

*Università degli Studi di Pavia*  
Pavia, Italy  
2019 - present

### **PhD programme in Genetics, Molecular and Cell Biology – XXXV ciclo**

Istituto di Genetica Molecolare L.L. Cavalli-Sforza – Consiglio Nazionale delle Ricerche (IGM-CNR)  
Computational Biology Unit  
Scientific supervisor: Prof. Silvia Bione

*Università degli Studi di Pavia*  
Pavia, Italy  
2017 - 2019

### **Master Degree in Molecular Biology and Genetics**

Experimental thesis: "Differential Expression Analysis and Machine Learning Approaches for the detection of sex-biased genes in human cerebellum"  
Supervisor: Prof. Silvia Bione  
Final Score: 110/110 *cum laude*

*Università Politecnica delle Marche*  
Ancona, Italy  
2013 - 2017

### **Bachelor degree in Biological Sciences**

Thesis: "The antibody Aducanumab: new therapeutic possibilities for Alzheimer disease"  
Supervisor: prof. Maria Grazia Ortore  
Final Score: 101/110

*Liceo Classico "Melchiorre Delfico"*  
Teramo, Italy  
2009 - 2013

### **High school leaving qualification in classical studies**

## EDUCATIONAL EXPERIENCES

*Uppsala Universitet*  
Uppsala, Sweden  
March – May 2019

### **Erasmus Plus Traineeship**

Symfonia Project  
Jan Komorowski's Bioinformatics Lab

*Istituto di Genetica Molecolare*  
*L.L. Cavalli Sforza*  
*CNR*  
2017 - 2019

**Experimental thesis internship**  
Computational Biology Unit  
Supervisor: Prof. Silvia Bione  
Co-supervisor: Dr. Monah Abou Alezz

*Università Politecnica delle Marche*  
Ancona, Italy  
2016

**Bachelor curricular internship**  
Biofisics Laboratory – Department of Life and Environmental Sciences  
Supervisors: Prof. Paolo Mariani  
Prof.ssa Maria Grazia Ortore

**PERSONAL  
AND PROFESSIONAL  
COMPETENCES**

**Lenguages**

Italian: mother tongue  
English: fluent  
Spanish: basic

**Specific Competences**

- In vitro fibrillation techniques for the study of amyloid diseases
- Optic Microscopy: sample preparation and data analysis
- X-ray diffraction: sample preparation and data analysis
- Next Generation Sequencing data analysis
- Differential Expression Analysis
- Machine Learning techniques

**Informatic capacities**

Operative Systems: Windows, MacOS, Linux  
Programs: Microsoft Word, Excel, PowerPoint, TextWrangler, Pages and similar  
Image analysis: ImageJ  
Diffraction data analysis: IgorPro  
Programming Languages: R, Bash, Python

**Personal strenghts**

Good problem solving capacities  
Capacity to work in a team, developed thanks to the previous lab experiences  
Propensity to dialogue and interpersonal relationships  
Natural inclination to work in multicultural environment

**Publications**

M. Abou Alezz, L. Celli, G. Belotti, S. Bione (submitted).  
Unexpected features of GC-AG introns in long non-coding and protein-coding genes suggest a new role as regulatory elements.

**Congress communications**

M. Abou Alezz, L. Celli, G. Belotti, S. Bione. Characterization of the genomic and splicing features of long non-coding RNAs using bioinformatics approaches. EMBO|EMBL Symposium: The Non-Coding Genome (16 – 19 October 2019), Heidelberg, Germany

M. Abou Alezz, L. Celli, G. Belotti, S. Bione. Computational Approach Towards Genomic Characterization of Human Long Non – Coding RNAs. EMBO Workshop: From epigenome towards epitranscriptome in cell fate choice (14-17 October 2018), Capri, Italy