Curriculum Vitae STELLA SICILIANI

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WORK EXPERIENCES

OCT 2017- ongoing (Pavia, Italy) Department of Biology and Biotechnology "Lazzaro Spallanzani"

Job description

• Study of the spatial distribution of RNA and epigenetic markers on the chromatin surface.

OCT 2015 – JULY 2017 (Pavia, Italy) National Research Council – Institute of Molecular Genetics

Bioinformatics Research (Internship)

PhD activity

Job description

G-quadruplexes are nucleic acid secondary structures, recently emerged to be involved in different biological processes. In the last few years several studied demonstrated the importance of these structures in regulating DNA replication and transcription. Mainly, it was shown that in presence or in absence of G-quadruplexes, replicative and transcriptional patterns changed. Indeed, G4s formation and maintenance are tightly regulated processes that require multiple molecules such as: helicases, well-demonstrated to be correlated with G4s unfolding; or TLS polymerases, currently studied to be involved in the bypass of these secondary structures. Between the TLS polymerases examined the main one was *Ref1*, but recently data provide important basis for the involvement of polymerase η in G4s bypassing. In this context, we decided to investigate what happens to the transcriptional profile of G4-containg genes in presence and in absence of polymerase η.

EDUCATION AND QUALIFICATIONS

OCT 2017- ongoing (Pavia, Italy)

PhD in Genetics, Molecular Biology and Cell Biology, University of Pavia

• The research activity is carried out in the Cell Biology and Neurobiology laboratory under the guidance of Prof. Marco Biggiogera

OCT 2015 - JULY 2017 (Pavia, Italy)

MSc in Molecular Biology and Genetics, University of Pavia (110 cum laude)

• Thesis in Bioinformatics, "Study of the putative role of polymerase η in modulation of G4-containing genes ", Supervisor: Dr. Silvia Bione.

OCT 2012 - JULY 2015 (Bari, Italy) BSc in Biological Science, Aldo Moro University

• Thesis in Genetics, "Unity of life on earth: from Darwin until today", Supervisor: Prof. Mariano Rocchi.

2007 - 2012 (Triggiano (BA), Italy) Second Level College of Science, Cartesio

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LANGUAGES

Italian: mother tongue English: fluent

SKILLS

INFORMATIC SKILLS

- Good use of programming languages (R, Python),
- Good use of the operative system Linux (Ubuntu) and Mac OS,
- Proficient use of data pipeline components (aligners, annotation tools, peak-calling, assemblers),
- Proficient use of biological interest database (NCBI, Ensembl, UCSC, David, STRING, Galaxy Platform, Enrichr, Gene Expression Omnibus (GEO), Gene Ontology (GO), MSigDB)
- Advance knowledge of Microsoft Office suite,
- Proficient use of LateX.

ORGANIZATION SKILLS

- Ability to operate and cooperate within a flexible working environment.
- A knowledgeable team member while working with a research group
- Good interaction in multicultural environments thanks to various experience abroad
- Hard worker

AWARDS

• Winner of "ERASMUS traineeship" fellowship 2017/2018

ACTIVITIES AND INTERESTS

VOLUNTEER EXPERIENCE / VOLUNTEERING

Telethon Volunteer December 2016 and April 2017

• Collecting funds for research against rare disease with Telethon association

AIRC Volunteer April 2015

• Collecting funds for research against cancer with AIRC association

Last update: 12/10/2017