



Giuseppe Cappelli

Home : [REDACTED]

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Phone: [REDACTED]

Date of birth: [REDACTED] Nationality: Italian

WORK EXPERIENCE

[06/05/2024 – Current]

Research fellowship

Istituto per la Ricerca e l'Innovazione Biomedica (IRIB)-Consiglio Nazionale delle Ricerche (CNR)

City: Palermo | **Country:** Italy

PLANS: Proximity Ligation And Nanopore Sequencing for the characterization of native RNA-protein interactions. Identification of protein partners of pseudouridine synthases in human cells.

- Cell cultures
- Protein extraction and quantification
- Western Blotting
- Proximity Biotinylation in living cells
- Generation of stable cell lines with Flp In T-REx system
- Streptavidin Pull Down
- Immunoprecipitation (IP)
- Immunofluorescence
- Microscopy
- Microbiological cultures
- Gene cloning
- Plasmid DNA extraction (Miniprep, Midiprep)
- Cell transfection
- Restriction enzyme digestion
- Agarose gel electrophoresis
- Nucleic Acid Extraction (DNA, RNA)
- PCR, Real-Time PCR (qPCR), Reverse Transcription qPCR (RT-qPCR)
- PCR primers design
- RNA-protein UV-Crosslinking
- UV-RNA Immunoprecipitation (UV-RIP)
- RNA Dot Blot

[18/01/2024 – 05/05/2024]

Research Internship

Istituto Zooprofilattico Sperimentale della Sicilia

Address: Via Gino Marinuzzi, 3, Palermo, 90129, Palermo, Italy

Molecular Biology Laboratory activities:

- Analysis of biological samples
- Nucleic Acid extraction
- PCR
- Gel electrophoresis
- Real-Time PCR (qPCR)
- Sanger Sequencing
- Next Generation Sequencing (NGS) - Illumina
- Diagnosis of Xylella fastidiosa in leaf samples
- Identification of species in animal or food samples
- Metagenomics in biological samples from aquaculture facilities
- Microsatellite analysis for genetic traceability in aquaculture

[01/11/2022 – 12/10/2023]

Experimental Thesis Internship

University of Palermo

City: Palermo | **Country:** Italy

Molecular Biology Laboratory

Thesis: "Genome wide analysis of the genes coding for Toll-like receptors in *Paracentrotus lividus*. Study of expression and evolution"

- Gene annotation of genes encoding Toll-like receptors in the sea urchin *P. lividus*
- Study of the expression levels of TLR genes in the main stages of sea urchin development
- Evolutionary study of Tlr genes in the main living organisms, through the analysis of the similarity of the Tlr protein sequences. Creation of phylogenetic trees

Software and tools used:

- BLAT - UCSC
- FGENESH - Softberry
- Prosite - Expasy
- Interpro - EMBL-EBI
- Genome Browser - UCSC
- NCBI
- Phylogeny
- MEGA11
- CLUSTAL W / OMEGA
- MUSCLE
- Treedyn - Phylogeny

[01/03/2019 – 23/07/2019]

Thesis Internship

Istituto Zooprofilattico Sperimentale della Sicilia

Address: Via Gino Marinuzzi, 3, Palermo , 90129, Palermo, Italy

Molecular Biology Laboratory activities:

- Analysis of biological samples
- Nucleic acid extraction
- Real-Time PCR (qPCR)
- Detection of Leishmania spp. for the diagnosis of Leishmaniasis in biological samples
- Microbiological cultures
- Microscopy
- Cell counts

EDUCATION AND TRAINING

[05/12/2023 – Current]

Membership in the Order of Italian Biologists

FNOB - Federazione Nazionale degli Ordini dei Biologi <https://www.fnob.it/>

City: Palermo | **Country:** Italy |

[01/12/2023 – Current]

Qualification to Practice as a Biologist, Section A

University of Palermo <https://www.unipa.it/>

City: Palermo | **Country:** Italy |

[01/09/2019 – 12/10/2023]

Master's Degree in Molecular and Health Biology (LM-6) (Molecular Biology Curriculum)

University of Palermo <https://www.unipa.it/>

City: Palermo | **Country:** Italy |

[01/09/2015 – 23/07/2019]

Bachelor's Degree in Biological Sciences (L-13)

University of Palermo | <https://www.unipa.it/>

City: Palermo | **Country:** Italy |

[10/09/2009 – 20/07/2014]

Scientific High School Diploma

Liceo Scientifico "Benedetto Croce" - Palermo | <https://www.liceocroce.edu.it/>

City: Palermo | **Country:** Italy |

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 **READING** C1 **WRITING** C1

SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Social Media | Browsing the Internet (experienced) | Microsoft Office (Outlook, Excel, Word, PowerPoint) | Video Conferencing (Zoom, Teams, Skype, Webex) - Advanced | Google (Google Meet, Google Docs, Google Classroom, Google Forms, Google Drive, Google Slide); | Google (Google Drive, Google Docs, Google Slides, Google Sheets, Google Meets, Google Trends)) | Bioinformatic database | bioinformatic tools | R, R Studio, R Markdown | Research and analytical skills | Google Suite (Doc, Slides, Form, Sheet, Drive) | Social Media including Facebook, WhatsApp and Twitter | Good listener and communicator | Organizational and planning skills | knowledge of presentation platforms (PowerPoint, Prezi, Canva) | Able to adapt to new situations and system. | Hard working, arranged, responsible | Ability to work effectively and efficiently under pressure | Team-work oriented