

## PERSONAL INFORMATION

Mariarosaria Firrincieli

Sex F | Nationality Italian

## POSITION

PhD student

## WORK EXPERIENCE

- |                       |   |
|-----------------------|---|
| 2018-by now           | <b>Research activity within the Ph.D. degree program in Molecular Medicine</b><br>Sapienza University of Rome, Department of Molecular Medicine <ul style="list-style-type: none"> <li>▪ evaluation of biological effects of curcumin-derived Notch inhibitors in T-cell acute lymphoblastic leukemia (In collaboration with the Department of Chemistry and Technology of Drugs, Sapienza University of Rome and the Department of Pharmaceutical Sciences of Amedeo Avogadro University of Eastern Piedmont);</li> <li>▪ evaluation of biological effects of plant-derived fractions containing xanthohumol and quercetin in vitro models of T-cell acute lymphoblastic leukemia;</li> <li>▪ screening of synthetic CDK-1 inhibitors and evaluation of their effects on Notch pathway in acute myeloid leukemia and T-cell acute lymphoblastic leukemia (In collaboration with the Department of Biological, Chemical and Pharmaceutical Sciences and Technologies of University of Palermo)</li> </ul> |
| 2016–18               | <b>Research activity within the master's degree program in Medical Biotechnology</b><br>Sapienza University of Rome, Department of Medical Histology <ul style="list-style-type: none"> <li>▪ evaluation of biological effects of retinoic acid in normal testis development and in adult human and murine blood-testis barrier and spermatogonial compartment</li> </ul>   |
| June 2015- April 2016 | <b>Occasional collaboration contract at Mariposa Onlus, in collaboration with Policlinico Umberto I, Rome</b> <ul style="list-style-type: none"> <li>▪ quantitative detection of anti-transglutaminase autoantibodies in saliva of patients with radioimmunoassays for screening and diagnostic purposes</li> </ul>   |
| 2013–16               | <b>Research activity within the bachelor's degree program in Biomedical Laboratory technician</b><br>Sapienza University of Rome, Department of immune endocrinology <ul style="list-style-type: none"> <li>▪ comparative study of presence and concentration of antibodies for identification of type I diabetes mellitus onset in adults and pediatric patients</li> <li>▪ quantitative detection of circulating autoantibodies and hormones by radioimmunoassay and enzymatic assay for diagnostic purposes</li> </ul>   |

## EDUCATION AND TRAINING

- |              |  |
|--------------|--|
| October 2020 | <b>Qualifying state examination for the Italian Guild of Biologists (Abilitazione alla professione di Biologo)</b><br>Università   |
| 2018-by now  | <b>Ph.D. Student in Molecular Medicine</b><br>Sapienza University of Rome, Department of Molecular Medicine  |
| 2016-2018    | <b>Master's degree in Medical Biotechnology</b><br>110/110 cum laude<br>Sapienza University of Rome, Department of Medical Histology <ul style="list-style-type: none"> <li>▪ <b>Master's thesis:</b> <i>"Regolazione dell'espressione genica acido retinoico-dipendente del compartimento spermatogoniale nell'uomo"</i></li> </ul> |

- 2013-16 Bachelor's Degree in Biomedical Laboratory technician  
110/110 cum laude  
Sapienza University of Rome, Department of immune endocrinology  
▪ **Graduate thesis:** "Diabete di tipo 1 alla diagnosi: comparazione dell'autoimmunità umorale specifica della malattia in pazienti pediatrici e adulti"

## PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Communication skills ▪ Good communication skills gained through the working experience in international laboratory environment

- Job-related skills
- Experimental research-related skills:
    - Cell culturing techniques (various cancer and non-malignant cell lines and primary cultures of Sertoli cells);
    - Tissue culturing techniques (seminiferous tubuli cultures, testicular tissue);
    - Transfection and infection of cells (electroporation, lipofection);
    - Extraction of DNA (genomic or episomal) and RNA from cells and tissues, PCR, RT-PCR, qPCR;
    - Cloning techniques and sample preparation for sequencing;
    - Sample preparation for FACS analysis (cell cycle analysis, apoptosis evaluation, ROS detection), and fluorescent and confocal microscopy, time-lapse phase contrast microscopy, scratch test assay;
    - Cytotoxicity and cell viability assays (MTS, MTT), IC50 determination;
    - SDS/PAGE-electrophoresis and immunoblotting of proteins;
    - Chromatin immunoprecipitation (ChIP) assay and immunoprecipitation (IP) assay;
    - Luciferase reporter assay;
    - Mouse tissue dissection and organ extraction; isolation of cells from human and murine testis;
    - Microtome and cryostat cutting, tissue and blood sample microscopy
    - in vitro transcription and translation assays;
  - Laboratory diagnostic-related skills:
    - Histological staining (haematoxylin-eosin, IF, IHC, Papanicolaou, PAS, Gomori, Congo Red, Prussian Blue);
    - Microbiological cultures and staining (Gram staining and Zhiel-Neelsen), blood cultures;
    - Basic use of blood and serum sample analysers (COBAS6000 Roche Diagnostic, Yumizen H2500/H1500, ARCHITECT i1000SR immunoassay analyser ABBOTT);
    - Radio-immuno assay (RIA, IRMA) and enzyme-Linked immunosorbent assay (ELISA);

- Computer skills
- good user of Microsoft Office™ tools
  - good user of EndNote
  - good user of EMBL ImageJ
  - good user of Photoshop
  - good user of GraphPad

## ADDITIONAL INFORMATION

## Publications

Nadezda Zhdanovskaya\*, **Mariarosaria Firrincieli\***, Sara Lazzari, Eleonora Pace, Pietro Scribani Rossi, Maria Pia Felli, Claudio Talora, Isabella Screpanti, and Rocco Palermo.  
*Targeting Notch to Maximize Chemotherapeutic Benefits: Rationale, Advanced Strategies, and Future Perspectives. Cancers 2021, 13, 5106.*  
<https://doi.org/10.3390/cancers13205106>

## Personal data

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196  
°Codice in materia di protezione dei dati personali".

Firma  
Mariarosaria Firrincieli