08/12/1995 Via Ezio Cesarini 6, Bologna (BO), 40129 +39 3341229968 linkedin.com/in/arianna-rossi895 ari.anna95@hotmail.it

# **ARIANNA ROSSI**

## EXPERIENCE



### SKILLS

**Technical Skills:** biomaterial synthesis, material physical-chemical characterization, morphology characterization: scanning electron microscopy (SEM). Biomaterial biological evaluation: cell culture, Western Blot, protein extraction and quantification, cell viability assays (MTT assay, Live and Dead assay, PrestoBlue Assay), quantitative real-time PCR (q RT-PCR), cellular fixation and staining, immunofluorescence (images qualitative and quantitative analyses), histological characterization, optical microscopy, inverted fluorescence microscopy.

Other: lipofectamine transfection, electroporation, Pull-Down Assay, live-cell imaging (Time-Lapse video analyses), bacterial DNA extraction, PCR, agarose gel electrophoresis, creation of NGS sequencing libraries, sequences analysis, anaerobic hood use.

**Programming Skills:** Microsoft Office (ECDL License), Photoshop, Adobe Illustrator, GIMP, InkScape, ImageJ, ImageStudio, GraphPad Prism, VMD, Marvin Sketch.

**Personal Skills:** problem-solving, teamwork, organisational skills, resources and time management skills, autonomy, initiative.

English (writing, listening, speaking): intermediate level.

# EDUCATION

II SESSION 2020	QUALIFICATION TO THE PROFESSION OF BIOLOGIST - UNIVERSITY OF SALENTO
OCTOBER 2017 –	PHARMACEUTICAL BIOTECHNOLOGIES, MASTER DEGREE (LM-9) – UNIVERSITY OF BOLOGNA
20/03/2020	Final Grade: 110 e Lode / 110
	Experimental thesis held at the Pharmacology Department of the Cambridge University (UK) during a seven months internship:
	• Title: A view on the ubiquitination code drives Aurora-B fate during mitosis.
	Supervisor: Prof. Santi Mario Spampinato
	We tried to unravel Aurora-B kinase ubiquitination code by analyzing N-terminus lysines and deubiquitination enzymes (USP13 and USP35) involvement. Aurora-B Lys4 was identified as the major residue controlling Aurora-B degradation, also it has a role in Aurora-B relocalization after anaphase onset. We found that USP35 is fundamental for cells to start mitosis and its depletion induces a mitotic block with the contribution of an increased Histone H3 phosphorylation of the Ser10 that is an Aurora-B target suggesting the interaction between Aurora-B and USP35. USP13 triggers a mild phenotype inducing non-complete Aurora-B relocalization after anaphase onset and an increased Histone H3 phosphorylation associated with different Aurora-B localization. USP13 seems to edit chains involved in Aurora-B localization, in particular, we showed for the first time its direct effect on K63 ubiquitin chain linkages that are known to trigger localization.
25/06/2018 -	SUMMER SCHOOL, PHARMACY AND BIOTECHNOLOGY DEPARTMENT- UNIVERSITY OF
03/07/2018	BOLOGNA
03/07/2010	Title: Chemical and genomics-based strategies in the discovery of novel drug targets.
OCTOBER 2014 –	BIOTECHNOLOGY, BACHELOR DEGREE (L-2) – UNIVERSITY OF BOLOGNA
24/07/2017	Final Grade: 110 e Lode / 110
	Experimental thesis held at the Microbiology laboratory of the Bologna University during a four months internship:
	• Title: Sviluppo di " <i>mini gut models</i> " e screening dell'attività modulatoria sul microbiota intestinale di dieci molecole approvate dall'FDA.
	Supervisor: Prof. Marco Candela
	In this thesis were evaluated the next-generation approach in order to modulate the microbiota. These are based on small molecules able to modify microbial community composition and functionalities.

We tried to set up an in vitro microbiota gut model, the *mini gut model*. Because of the microbial ecosystem complexity, the model optimization played a key role to ensure significant results.

Ten molecules, chosen from already FDA-approved drugs, were tested. All of them showed a modulatory effect on the microbiota and one also the ability to direct the composition to health-promoting microorganisms.

## SEPTEMBER 2009 – SCIENTIFIC LYCEUM – DIPLOMA – IIS LUIGI FANTINI, VERGATO (BO)

Final Grade: 100 / 100

Two weeks internship at Life Learning Center, laboratory technician duties and support to the center educational activities.

### SCIENTIFIC PUBLICATION

04/07/2014

Furlani Franco, <b>Rossi Arianna</b> , Grimaudo Maria Aurora, Bassi Giada, Giusto Elena, Montesi Monica, and Panseri Silvia. Extracellular vesicles-mimetic delivery from thermosensitive hydrogel for regenerative medicine. International Journal of Molecular Sciences, 2022.
 Grimaudo M.A., Krishnakumar G.S., Giusto E., Furlani F., Bassi G., <b>Rossi A.</b> , Molinari F., Lista F., Montesi M., Panseri S. Bioactive injectable hydrogels for on demand molecule/cell delivery and for tissue regeneration in the central nervous system. Acta Biomaterialia, 2021.
Torcasio Serena Maria, Montesi Monica, Panseri Silvia, <b>Rossi Arianna</b> , Bassi Giada, Mazzaglia Antonino, Anna Piperno Anna, Coulembier Olivier, and Scala Angela. Synthesis and biological profile of novel three-arms star-shaped PLA-PEG amphiphilic copolymers. Conference Abstract, 2021. XXVII Congresso Nazionale Della Società Chimica Italiana.
 Furlani Franco, Grimaudo Maria Aurora, Bassi Giada, <b>Rossi Arianna</b> , Montesi Monica, Panseri Silvia. <i>In vitro</i> simulation of extracellular vesicles delivery from thermosensitive nanocomposite hydrogel for regenerative medicine. Poster, 2021. 31 <sup>st</sup> Conference of the European Society for the Biomaterials (ESB).
Bassi Giada, Panseri Silvia, <b>Rossi Arianna</b> , Campodoni Elisabetta, Sandri Monica, Dapporto Massimiliano, Sprio Simone, Tampieri Anna, Montesi Monica. Scaffold-based 3D cellular models mimicking the heterogeneity of osteosarcoma stem cell niche. Conference Abstract, 2021. 31 <sup>st</sup> Conference of the European Society for the Biomaterials (ESB).

Date

18/01/2022

Signature	•
AzianneRossi	