Sara Lazzari Curriculum Vitae

Data

First Name: Sara
Last Name: Lazzari
Nationality: Italian
Gender: female

Work experience

(2019-Now) **Research activity within the Ph.D. degree program in Molecular Medicine**, Sapienza University of Rome, Department of Molecular Medicine

- Investigation of epigenetic regulation of Notch signaling and evaluation of histone modifiers inhibitors on Notch signaling in different cancer contexts *in vitro*;
- Evaluation of curcumin-derived compounds on Notch signaling and DNA repair in *in vitro* models of T-cell acute lymphoblastic leukemia (In collaboration with Department of Pharmaceutical Sciences of Amedeo Avogadro University of Eastern Piedmont)

(2018-2019) **Research activity within the Master degree program in Medical Biotechnology,** Sapienza University of Rome, Department of Molecular Medicine

- Investigation of epigenetic regulation of Notch signaling in different cancer contexts *in vitro*;

(February 2017-July 2017) **Occasional collaboration contract** at Mariposa Onlus, in collaboration with Policlinico Umberto I, Rome

- Radioimmune assay-based dosage of anti-transglutaminase autoantibodies in patient's saliva for celiac disease screening.

(2016 – 2017) **Research activity within the Bachelor degree program in Biomedical laboratory techniques,** Sapienza University of Rome, Department of immuno-endocrinlogy

- Dosage of circulating autoantibodies with radio-immunoprecipitation of different autoimmune disorders for research purpose;
- Dosage of circulating autoantibodies and hormone with radioimmunoassay and enzymatic-immunoassay for diagnostic purpose.

Education

(2019-Now) **PhD Student in Molecular Medicine**, Sapienza University of Rome, Department of Molecular Medicine

(2020) **Qualifying state examination for the Italian Guild of Biologists** (Abilitazione alla professione di Biologo)

(2018-2019) **Master's degree in Medical Biotechnology**, Sapienza Univeristy of Rome

Thesis Title: *Regolazione contesto-dipendente del signaling di Notch in risposta all'inibizione di modificatori istonici* (*Context-dependent regulation of Notch signaling following histone modifier inhibition")*
Final Mark: 110/110 cum laude

(2014 – 2017) **Bachelor's degree in Biomedical Laboratory Techniques, Sapienza University of Rome**
Thesis Title: *Autoimmunità organo specifica alla diagnosi del diabete di tipo 1 in pazienti maggiori di 18 anni (Organ-specific humoral autoimmunity at diagnosis of type 1 diabetes in adult patientis)*

Final Mark: 110/110

Publications

Tottone L., Zhdanovskaya, N., Carmona Pestaña A., Zampieri M., Simeoni F., **Lazzari S.**, Ruocco V., Pelullo M., Caiafa P., Felli M.P, Checquolo S., Bellavia D., Talora C., Screpanti I. and Palermo R.
Histone modifications Drive Aberrant Notch3 Expression/Activity and Growth in T-ALL. Front Oncol, 2019. **9**: p. 198.

Zhdanovskaya, N.; Firrincieli, M.; **Lazzari, S.**; Pace, E.; Scribani Rossi, P.; Felli, M.P.; Talora, C.; Screpanti, I.; Palermo, R.
Targeting Notch to Maximize Chemotherapeutic Benefits: Rationale, Advanced Strategies, and Future Perspectives. Cancers **2021**, 13,5106.

Del Gaizo, M.; Sergio, I.; **Lazzari, S**.; Cialfi, S.; Pelullo, M.; Screpanti, I.; Felli, M.P.
MicroRNAs as Modulators of the Immune Response in T-Cell Acute Lymphoblastic Leukemia. Int. J. Mol. Sci. 2022, 23, 829.

Zhdanovskaya, N.*; **Lazzari, S**.*; Caprioglio, D.; Firrincieli, M.; Maioli C.; Pace E.; Imperio D.; Talora C.; Bellavia D.; Checquolo S.; Mori M.; Screpanti I.; Minassi A.; Palermo R.
Identification of a novel curcumin derivative influencing Notch pathway and DNA damage as a potential therapeutic agent in T-ALL. (*co-first authors).

Conferences partecipation

SIPMet Young Scientist Meeting 2021, Perugia 10-11 December (E-Poster)
Sara Lazzari, Eleonora Pace, Mariarosaria Firrincieli, Nadezda Zhdanovskaya, Luca Tottone, Isabella Screpanti, and Rocco Palermo.
The Histone Methyltransferase EZH2 prevents the oncosuppressive role of Notch signaling

EACR 2022 Congress, Seville 20 – 23 June (Poster)
Sara Lazzari, Eleonora Pace, Mariarosaria Firrincieli, Nadezda Zhdanovskaya, Luca Tottone, Isabella Screpanti, and Rocco Palermo.
EZH2 inhibition activates Notch oncosuppressive program in cervical cancer and acute myeloid leukemia cells

Awarded grants

Application n AR12117A7C74DD9E Bando Ricerca 2021: Avvio alla Ricerca Tipo 1, Sapienza University of Rome funding.
Title: Study of the epigenetic mechanisms behind Notch signaling repression in cancer

Languages

Italian Mother tongue
English B2 written and spoken

Job-related skills

- Experimental research-related skills:
  - Cell culturing techniques (various cancer and non-malignant cell lines);
  - Transfection of cells (electroporation, lipofection);
  - Extraction of plasmid DNA from bacterial cells and RNA from eukaryotic cells, PCR, RT-PCR, qPCR;
  - Cloning techniques;
  - Sample preparation for FACS analysis (cell cycle analysis, apoptosis evaluation, ROS detection), and 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;
  - Comet assay,
  - Luciferase reporter assay;
  - transcription and translation in vitro and purification of radiolabeled antigens;
- Laboratory diagnostic-related skills:
  - Basic use of blood and serum sample analysers (Yumizen H2500/H1500, ARCHITECT i1000SR immunoassay analyser ABBOTT);
  - Histological staining (haematoxylin-eosin, IF, IHC, Papanicolaou, PAS, Gomori, Congo Red, Prussian Blue);
  - Microbiological cultures and staining (Gram staining and Zhiel-Neelsen)
  - Haematological staining (May Grunwald-Giemsa)
  - Basic use of blood and serum sample analysers (Yumizen H2500/H1500, ARCHITECT i1000SR immunoassay a;
  - Radioimmunoassay (RIA), immuno radiometric assay (IRMA), enzymatic like-immunosorbent assay (ELISA), enzymatic immunoassay (EIA)

Computers skills

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

Autorizzo il trattamento dei miei dati personali ai sensi del D.lgs. 196 del 30 giugno 2003.

Data 06/01/2023 Firma: Sara Lazzari