



Daniel Di Risola

WORK EXPERIENCE

01/11/2020 – 12/12/2023 Rome, Italy

PHD IN BIOCHEMISTRY SAPIENZA UNIVERSITY OF ROME

17/10/2022 – 16/12/2022 Lyon, France

VISITING PHD STUDENT INSTITUT DES SCIENCES ANALYTIQUES (ISA)

During my PhD I had the chance to conduct wide-spectrum lipidomic experiments at Institut des Sciences Analytiques (ISA), in Lyon (France). Obtained data were helpful in the study of the effect of the olive oil polyphenols in a Down syndrome mouse model.

31/08/2019 – 23/10/2020 Rome, Italy

INTERNSHIP IN BIOCHEMICAL LABORATORY SAPIENZA UNIVERSITY OF ROME

During the work for the preparation of my thesis I studied the biochemical and biological features of ERp57, a protein disulfide isomerase possibly involved in counteracting Alzheimer's Disease.

29/02/2016 – 31/10/2018 Rome, Italy

INTERNSHIP IN BIOMEDICAL LABORATORIES UMBERTO I ST HOSPITAL AND SAPIENZA UNIVERSITY OF ROME

During my bachelor's degree I had the opportunity to attend different laboratories of the "Umberto I" hospital of Rome, achieving competence and knowledge in microbiology and parasitology, histology, cytology, molecular biology, specialistic hematology, tumor and biochemical markers. The last 18 months of this period I attended an endocrinology laboratory, acquiring competences on ELISA and radio-immuno assays (RIA).

EDUCATION AND TRAINING

01/11/2020 – 12/12/2023 Rome, Italy

PHD IN BIOCHEMISTRY La Sapienza university of Rome

Address piazzale Aldo Moro, 5, 00185, Rome, Italy |

Website https://phd.uniroma1.it/web/BIOCHIMICA_nD3487_IT.aspx

31/10/2018 – 23/10/2020 Rome, Italy

MASTER DEGREE IN MEDICAL BIOTECHNOLOGY La Sapienza university of Rome

Address piazzale Aldo Moro, 5, 00185, Rome, Italy |

Website <https://corsidilaurea.uniroma1.it/it/corso/2018/29897/home> | **Final grade** 110/110 cum laude

09/09/2015 – 12/11/2018 Rome, Italy

BACHELOR DEGREE IN BIOMEDICAL LABORATORY TECHNICIAN La Sapienza university of Rome

Address piazzale Aldo Moro, 5, 00185, Rome, Italy |

Website <https://corsidilaurea.uniroma1.it/it/corso/2016/15989/home> | **Final grade** 110/110 cum laude

Address via montebello 122, 00100, Rome, Italy |

Website http://www.liceoplinio.edu.it/index.php?option=com_content&view=article&id=23&Itemid=136

● **DIGITAL SKILLS**

Statistics

Graph Pad Prism 5 | R (R-studio) | Microsoft Excel

Presentation and organization

Microsoft Office | Inkscape

Structural biology and in silico experiments

Pymol | UCSF-Chimera | HPEPDOCK

Western blot analysis

Image Lab | Image J (Laboratory Image Analysis)

LC-MS data management and analysis software

Empower 3 | Analyst (AB Sciex) | Sciex OS | Skyline MS software

Omics data analysis

Metaboanalyst | MicrobiomeAnalyst

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2
FRENCH	A2	A2	A2	A2	A2

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

● **ADDITIONAL INFORMATION**

KEYWORDS

Alzheimer's disease ; Polyphenols ; LC-MS systems ; Lipidomics/Proteomics

PUBLICATIONS

[ERp57 Chaperon Protein Protects Neuronal Cells from A \$\beta\$ -induced toxicity](#) – 2022

Daniel Di Risola, Daniela Ricci, Ilaria Marrocco, Flavia Giamogante, Maddalena Grieco, Antonio Francioso, Aldrin Vasco-Vidal, Patrizia Mancini, Gianni Colotti, Luciana Mosca, Fabio Altieri

Optimization of Potent and Specific Trypanothione Reductase Inhibitors: A Structure-Based Drug Discovery Approach

– 2022

Theo Battista, Stefano Federico, Simone Brogi, Luca Pozzetti, Tuhina Khan, Stefania Butini, Anna Ramunno, Eleonora Fiorentino, Stefania Orsini, Trentina Di Muccio, Annarita Fiorillo, Cécile Exertier, **Daniel Di Risola**, Gianni Colotti, Sandra Gemma, Andrea Ilari, Giuseppe Campiani

Effect of Natural Deep Eutectic Solvents on trans-Resveratrol Photo-Chemical Induced Isomerization and 2,4,6-Trihydroxyphenanthrene Electro-Cyclic Formation

– 2022

Roberto Mattioli, **Daniel Di Risola**, Rodolfo Federico, Alessia Ciogli, Francesco Gasparri, Claudio Villani, Mario Fontana, Anna Maggiore, Maria d'Erme, Luciana Mosca, Antonio Francioso

Synthesis and Chromatographic Determination of S-Nitrosopantetheine: Exploring Reactivity and Stability in Different Aqueous Solutions

– 2022

Daniel Di Risola, Roberto Mattioli, Giulia Mazzocanti, Simone Manetto, Maurizio Trovato, Mario Fontana, Luciana Mosca, Antonio Francioso

Polyacrylate-Cholesterol Amphiphilic Derivative: Formulation Development and Scale-up for Health Care Applications

– 2023

Write here the desViola, M., Migliorini, C., Ziarelli, F., Viel, S., Cencetti, C., **Di Risola, D.**, Mosca, L., Masuelli, L., Matricardi, P., & Di Meo, C

Natural deep eutectic solvents protect RNA from thermal-induced degradation – 2023

Mattioli, R., Maggiore, A., **Di Risola, D.**, Federico, R., D'Erme, M., Francioso, A., & Mosca, L.

Olea europaea L-derived secoiridoids: Beneficial health effects and potential therapeutic approaches

– 2024

Write here the desSimone Filardo, Mattioli Roberto, **Daniel Di Risola**, Luciana Mosca, Marisa Di Pietro, Rosa Sessacription...

CONFERENCES AND SEMINARS

28/09/2022 – 30/09/2022 – Oral presentation at 15th World Congress on Polyphenols Applications - ADEIT, Valencia (Spain)

Olive oil polyphenols protect the brain from chronic low-grade inflammation **Daniel Di Risola**, Daniele Antinori, Matthew G. Pontifex, Gwenaelle Le Gall, Andrea Fuso, Anna Maggiore, Roberto Mattioli, Michael Caloisi, Maria d'Erme, Antonio Francioso, Michael Müller, Luciana Mosca and David Vauzour

06/06/2022 – 09/06/2022 – Oral presentation at 33rd National Meeting "A. Castellani" - Brallo di Pregola (PV)

ERp57 Chaperon Protein Protects Neuronal Cells from A β -induced toxicity **Daniel Di Risola**, Daniela Ricci, Ilaria Marrocco, Flavia Giamogante, Maddalena Grieco, Antonio Francioso, Aldrin Vasco-Vidal, Patrizia Mancini, Gianni Colotti, Luciana Mosca, Fabio Altieri

08/12/2021 – 09/12/2021 – Oral presentation at 2nd International Conference on Neuroprotection 2021 - Camerino (MC)

Olive oil polyphenols protect the brain from chronic low-grade inflammation **Daniel Di Risola**, Daniele Antinori, Matthew G. Pontifex, Gwenaelle Le Gall, Andrea Fuso, Anna Maggiore, Roberto Mattioli, Michael Caloisi, Maria d'Erme, Antonio Francioso, Michael Müller, Luciana Mosca and David Vauzour

27/10/2021 – 28/10/2021 – Poster session at Virtual EMBO Workshop Microglia 2021

The effect of β -hexachlorocyclohexane (β -hch) in bv2 microglia cells Maggiore Anna, Grieco Maddalena, Francioso Antonio, Serena Ficchi, **Di Risola Daniel**, Maras Bruno, Mosca Luciana and d'Erme Maria

TECHNICAL SKILLS AND COMPETENCES

Cellular biology

Handling of cell culture

- SHSY-5Y human neuroblastoma,
- BV2 murine microglia,
- HepG2 murine hepatocytes,

- CaCo-2 human colorectal adenocarcinoma,
- HaCaT human keratinocytes
- RAW-264.7 murine macrophages

Cell lines co-culture

Cell viability assays: LDH assay, MTT assay, Crystal violet assay, Trypan blue

SDS-page, Western blot and slot blot analysis

RT-PCR

Protein pull down

Immunofluorescence microscopy

ELISA assay

Chromatography and mass spectrometry

HPLC / UPLC systems (AGILENT / WATERS)

ESI - Q / QQQ quadrupole MS systems (EMPOWER / SCIEX OS)

Data analysis

Manipulation of large data sets

Data analysis using major servers such as METABOANALYST and MICROBIOMEANALYST

Enzymatic activity

Cyclooxygenase activity assay

Radio-labeled assays

Hormonal dosage by radioimmunoassay (IRMA) and radioimmunoassay (RIA)

Flow cytometry

Histology and cytology

Preparation of the histological and cytological samples

Use of the major dyes and slide-reading ability

Microbiology and parasitology

Use of the major dyes (gram, ziehl-nielsen, pas) and slide-reading ability

Seeding and colony identification by colorimetric, enzymatic and molecular assays

Antioxidant assays

DPPH, NBT, TBARS

COMMUNICATION AND INTERPERSONAL SKILLS

Problem solving It is the most important aspect in every kind of work. I'm a thinking-out-the-box person and I really like to solve problems like they were a challenge.

Resolution It is the main feature of a leader. I believe this is the key to success as it allows you to achieve the set goals without hesitation.

Communicability It is the key word in a group and beyond it. No cohesion occurs between people without the communication. If we want to achieve our goals, we have to channel our determination and desire to get it.

DRIVING LICENCE

Driving Licence: B

HOBBIES AND INTERESTS

Voracious reader I literally read everything. I prefer the novels, especially the french and the american ones, but also the poetry delight me.

Tireless cinephile I developed a great taste in movies and this helped me understand myself better

Documentary maker and video editor As a good cinephile I could not avoid the desire to direct a movie by myself, so I decided to start this path.

GRANTS AND AWARDS

Bando contributi soggiorno estero SIB 2022

Avvio alla ricerca 2022-2023

Avvio alla ricerca 2023-2024

PATENTS

06/03/2023 – CURRENT

pending patent - NUOVA ASSOCIAZIONE SINERGICA ANTINFIAMMATORIA, ANTIOSSIDANTE E ANTIBATTERICA

Moretti Mattia, Mattioli Roberto, Di Risola Daniel, Mosca Luciana