



Chiara Longo

WORK EXPERIENCE

31/10/2020 – 31/10/2023 Rome, Italy

PHD PHD IN LIFE SCIENCE, SCHOOL BEMM, BIOLOGY AND MOLECULAR MEDICINE, SAPIENZA UNIVERSITY OF ROME

XXXVI cycle, PhD in Life Sciences [10/31/2020 – 10/31/2023]

School of Doctorate BeMM, Biology and Molecular Medicine, Sapienza University of Rome

Department of Biochemical Sciences, La Sapienza University

c/o Department of Biology and Biotechnology Charles Darwin

Tutor: Prof. Vittorioso – supervisor Prof. Costi

31/07/2020 – 31/07/2021 Rome, Italy

EDITORIAL ASSISTANT DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY CHARLES DARWIN, SAPIENZA UNIVERSITY OF ROME

Editorial support

Postgraduate course 'Science in journalistic practice'

Department of Biology and Biotechnology Charles Darwin

Sapienza University of Rome

First place winner of the public call

EDUCATION AND TRAINING

31/10/2020 – 31/10/2023 Rome, Italy

PHD PhD in Life Science, School BeMM, Biology and Molecular Medicine, Sapienza University of Rome

XXXVI cycle, PhD in Life Sciences [10/31/2020 – 10/31/2023]

School of Doctorate BeMM, Biology and Molecular Medicine, Sapienza University of Rome

Department of Biochemical Sciences, La Sapienza University

c/o Department of Biology and Biotechnology Charles Darwin

Tutor: Prof. Vittorioso – supervisor Prof. Costi

Thesis topic: Plant epigenetics, genetics and molecular biology; pharmacological strategy in plants.

Field of study Natural sciences, mathematics and statistics |

Thesis The Role of Polycomb Repressive Complex 2 homologs in regulating cold acclimation and freezing tolerance in *Arabidopsis thaliana*

10/05/2023 – 20/08/2023 Barcelona, Spain

PHD VISITOR CRAG Centre for research in agricultural Genomics

PhD visitor

c/o CRAG Centre for research in agricultural Genomics

Epigenetics and plant development

Laboratory of Dr. Julia Qüesta

Winner of Sapienza founding grant for PhD student mobility' **Website** <https://www.cragenomica.es/>

12/09/2022 – 14/09/2022 Prague, Czechia

TRAINING SCHOOL EPICATCH COST European Cooperation for Science and Technology

Training School Epicatch: 'Plant epigenetics, heritability, adaptation, evolution: latest advances digested for beginners', Attendance

c/o Charles University, Prague

Winner of Epicatch COST Action CA19125 travel grant

Website <https://www.cost.eu/>

30/06/2022 – 01/07/2022 Viterbo, Italy

SUMMER SCHOOL Nanoinnovation2022 and La Tuscia University

Summer school: Nanotechnology in Agriculture, Attendance

c/o Department of Agricultural and forest sciences DAFNE

La Tuscia University, Viterbo

Website <https://www.nanoinnovation2022.eu/home/>

21/10/2020 Rome, Italy

MASTER'S DEGREE IN GENETICS AND MOLECULAR BIOLOGY Sapienza University of Rome

Master's Degree in Genetics and Molecular Biology

Department of Biology and Biotechnology Charles Darwin

Sapienza University of Rome

Experimental thesis c/o Prof. Vittorioso Laboratory of plant molecular biology

10.01.2018 - 20.10.2020

Website <https://www.uniroma1.it/> | **Final grade** 110/110 cum laude |

Thesis Development of a pharmacological approach to study epigenetic mechanisms in Arabidopsis thaliana : inhibition of the activity of Enhancer Of Zeste Homolog2 (EZH2) and of P300/CBP protein related to acetyl transferase (HACs).

17/12/2017 Rome, Italy

BACHELOR'S DEGREE IN BIOLOGICAL SCIENCE Sapienza University of Rome

Bachelor's Degree in Biological Science

Department of Biology and Biotechnology Charles Darwin

Sapienza University of Rome

Experimental thesis c/o Prof. Vittorioso Laboratory of plant molecular biology

20.08.17 - 16.12.2017

Website <https://www.uniroma1.it/> | **Final grade** 107/110 |

Thesis Study on the activity of a new generation EZH2 inhibitor on seeds and seedlings of Arabidopsis thaliana

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B1	B2	B2

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

● ADDITIONAL INFORMATION

CONFERENCES AND SEMINARS

02/05/2023 – 03/05/2023 – Parma, Italy

COST EPI_CATCH Epigenetic mechanisms in plant responses to environmental stresses

EPI_CATCH talk and poster:

PRC2 involvement in plant response to cold stress: phenotypic and transcriptomic analysis in response to chilling and freezing temperatures

Longo C., D'Orso F., Possenti M., Paciolla A., Morelli G. and Vittorioso P..

13/06/2022 – 17/06/2022 – Montpellier, France

EMBO workshop - Molecular responses of plants facing climate change

EMBO workshop, poster New strategy to study plants' epigenetic plasticity against cold stress: a chemical-based approach.

Longo C., Lepri A., Messore A., Madia V. N., Vittorioso P..

18/05/2022 – 19/05/2022 – Prague, Czech Republic

7th European Workshop on Plant Chromatin (EWPC2022) 7th European Workshop on Plant Chromatin (EWPC2022), Poster

New strategies to study plant epigenetic plasticity: a chemical-based approach.

Longo C., Lepri A., Messore A., Madia V.N., Bonaccorsi M.C., Vittorioso P..

12/07/2021 – 14/07/2021 – Online

EPI-CATCH Epigenetic Mechanisms of Crop Adaptation to Climate Change

EPI-CATCH 2021, Attendance

28/06/2021 – 01/07/2021 – Online

FESPB & EPSO Plant Biology Europe 2021

Plant Biology Europe 2021, Attendance

PUBLICATIONS

Small Molecules: An Up-and-Coming Synergy – 2023

Lepri, A., Longo, C., Messore, A., Kazmi, H., Madia, V. N., Di Santo, R., Costi, R., & Vittorioso, P. (2023). Plants and Small Molecules: An Up-and-Coming Synergy. *Plants* (Basel, Switzerland), 12(8), 1729. <https://doi.org/10.3390/plants12081729>

New Inhibitors of the Human p300/CBP Acetyltransferase Are Selectively Active against the Arabidopsis HAC Proteins – 2022

Longo, C., Lepri, A., Paciolla, A., Messore, A., De Vita, D., Bonaccorsi di Patti, M. C., Amadei, M., Madia, V. N., Ialongo, D., Di Santo, R., Costi, R., & Vittorioso, P. (2022). New Inhibitors of the Human p300/CBP Acetyltransferase Are Selectively Active against the Arabidopsis HAC Proteins. *International journal of molecular sciences*, 23(18), 10446. <https://doi.org/10.3390/ijms231810446>

From the Outside to the Inside: New Insights on the Main Factors That Guide Seed Dormancy and Germination – 2020

Longo, C., Holness, S., De Angelis, V., Lepri, A., Occhigrossi, S., Ruta, V., & Vittorioso, P. (2020). From the Outside to the Inside: New Insights on the Main Factors That Guide Seed Dormancy and Germination. *Genes*, 12(1), 52. <https://doi.org/10.3390/genes12010052>

The DOF Transcription Factors in Seed and Seedling Development – 2020

Ruta, V., Longo, C., Lepri, A., De Angelis, V., Occhigrossi, S., Costantino, P., & Vittorioso, P. (2020). The DOF Transcription Factors in Seed and Seedling Development. *Plants* (Basel, Switzerland), 9(2), 218. <https://doi.org/10.3390/plants9020218>

Inhibition of Polycomb Repressive Complex 2 activity reduces trimethylation of H3K27 and affects development in Arabidopsis seedlings. – 2019

Ruta, V., Longo, C., Boccaccini, A., Madia, V. N., Saccoliti, F., Tudino, V., Di Santo, R., Lorrain, R., Dello Ioio, R., Sabatini, S., Costi, R., Costantino, P., & Vittorioso, P. (2019). Inhibition of Polycomb Repressive Complex 2 activity reduces trimethylation of H3K27 and affects development in *Arabidopsis* seedlings. *BMC plant biology*, 19(1), 429. <https://doi.org/10.1186/s12870-019-2057-7>

DIGITAL SKILLS

General informatics

Good knowledge of the major operating systems, for desktop (Windows, MacOS) and (Android, iOS).
Excellent knowledge of the Microsoft Office (Word, Power Point, Excel, Outlook, etc.)and Gsuite (Hangouts, Calendar, Drive, Docs, Sheets, etc.).
Good use of Adobe Creative Suite (Acrobat, Photoshop, In Design, Cloud, etc.), Inkscape, Audacity and FFmpeg software. Basic knowledge of programming languages (HTML, R).

Bioinformatics

Good knowledge of Life Science softwares (Imagelab, PyMOL, Q-rex, ImageJ, etc), of the biological databases (UniProt, Ensembl, PDBe) and search engines for Life Sciences (Pubmed, Google scholar, etc.).
Good knowledge of different bioinformatic tools for biological OMICS and gene onthology analyses (EMBL-EBI tools, MeV, DAVID, SWISS-MODEL, PANTHER, DIANE etc.)

LAB SKILLS

Plant molecular biology

Roma, 23/05/2024