TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO **ID CODE 5889**

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze Farmacologiche e Biomolecolari "Rodolfo Paoletti"**

Scientist- in – charge: Prof. Mitro Nico

Lara Coppi

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Coppi
Name	Lara

PRESENT OCCUPATION

Appointment	Structure
PhD student	Dipartimento di Scienze Farmacologiche e Biomolecolari "Rodolfo Paoletti"

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Bachelor's degree	Biotecnologie mediche	Università degli Studi di Milano	AY 2016/2017
Degree	Medical Biotechnology and Molecular Medicine	Università degli Studi di Milano	AY 2018/2019
PhD	Pharmacological Biomolecular Sciences, Experimental and Clinical	Università degli Studi di Milano	Title in achievement AY 2022/2023
Other	Advanced course in Benessere dell'animale da laboratorio ed animal care	Università degli Studi di Milano	AY 2019/2020

Other	4th European Summer school on Nutrigenomics	Università di Camerino	AY 2020/2021
Other	Open day 3Rs	Università degli Studi di Milano	AY 2019/2020
Other	Introductory course to animal studies	Università degli Studi di Milano	AY 2018/2019

FOREIGN LANGUAGES

Languages	level of knowledge
English	C1
French	A1
Spanish	A1

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2022	Best Oral Presentation at Convegno Regionale SISA Lombardia
2022	European Atherosclerosis Society (EAS) Young Investigator Fellowship
2021	European Summer School on Nutrigenomics Attendance Grant

TRAINING OR RESEARCH ACTIVITY

The research activity is mainly focused on the field of adipose tissue metabolism regulation by epigenetic modifiers applied to obesity and metabolic disorders. The main interest of the activity is the role of histone deacetylase 3 (HDAC3) in adipose tissue browning, taking into consideration sex differences, alternative thermogenesis mechanisms, and plasticity of adipose tissue.

Expertise in the following techniques:

- *In vivo* models: breeding, genotyping, IP injection, ITT test, GTT test, monitoring of estrous cycle phases, histological analysis, sample preparation and metabolite analysis via LC-MS/MS
- *In vitro* models: handling of several mammalian cell cultures (primary and immortalized cell lines), DNA and mRNA extraction, qPCR, mitochondrial DNA quantification, western blot, glucose uptake assay, mitochondrial functionality assay through Seahorse analyzer, bacterial cultures and transformation, plasmid extraction, transfection, infection with adenoviral systems, characterization of new compounds activity and cytotoxicity, cell proliferation assay via flow cytometry, flow cytometry surface marker analysis, lipid content quantification, glycerol release, microscopy acquisition and analysis (brightfield and fluorescence microscopes)
- Software and statistical analysis: use of software for bioinformatic analysis of genomic data as Gene Set Enrichment Analysis and Integrative Genomics Viewer. Use of ImageLab for the analysis of gels and blots. Use of GraphPad for preparing graphs and for performing statistical analysis. Use of Biorender for the creation of figures.

PROJECT ACTIVITY

Year	Project
2020-Current	Epigenetic regulation of adipose tissue metabolism in obesity and type 2 diabetes
2020	Epigenome modification and regulation of adipose tissue
2019	Epigenetic regulation of adipose tissue metabolism in females: pilot study in pre-clinical models
2016-2017	Study of the human skeletal muscle proteome applied to research of the pathological mechanism in facioscapulohumeral muscular dystrophy with top-down and bottom-up proteomics

CONGRESSES AND SEMINARS

Date	Title	Place
10/2023	Speaker at 63rd International Conference on the Bioscience of Lipids	Palma de Mallorca (Spain)
09/2023	Speaker at Young Biochemists in Lombardy	Brescia (Italy)
09/2023	Poster presenter at 46th European Lipoprotein Club (ELC) meeting	Tutzing (Germany)
04/2023	Poster presenter at EMBO Workshop "Ferroptosis: When metabolism meets cell death"	Seeon (Germany)
09/2022	Speaker at Convegno Regionale SISA Lombardia	Milan (Italy)
06/2022	Poster presenter at Young Biochemists in Lombardy	Milan (Italy)
05/2022	Science at a Glance Speaker at 90th European Atherosclerosis Society (EAS) Congress	Milan (Italy)
09/2021	Speaker at 61st Società Italiana di Biochimica e Biologia Molecolare (SIB) Congress	Virtual edition
09/2021	Poster presenter at 44th European Lipoprotein Club (ELC) meeting	Tutzing (Germany)
05/2021	Speaker at 4th European Summer School on Nutrigenomics	Virtual edition
09/2020	Speaker at Convegno Regionale SISA Lombardia	Milan (Italy)

PUBLICATIONS

Articles in reviews

Histone Deacetylase 3 Regulates Adopocyte Phenotype at Early Stages of Differentiation, Research article, Dalma Cricrí*, Lara Coppi*, Silvia Pedretti, Nico Mitro, Donatella Caruso, Emma De Fabiani, and Maurizio Crestani, International Journal of Molecular Sciences, 2021, 22, 9300

https://doi.org/10.3390/ijms22179300

PGC1s and Beyond: Disentangling the Complex Regulation of Mitochondrial and Cellular Metabolism, Review article, Lara Coppi*, Simona Ligorio*, Nico Mitro, Donatella Caruso, Emma De Fabiani, and Maurizio Crestani, International Journal of Molecular Sciences, 2021, 22, 6913

https://doi.org/10.3390/ijms22136913

Inhibition of Class I HDACs imprints adipogenesis towards oxidative and brown-like phenotype, Research article, Alessandra Ferrari, Raffaella Longo, Carolina Peri, Lara Coppi, Donatella Caruso, Antonello Mai, Nico Mitro, Emma De Fabiani, Maurizio Crestani, Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids, Volume 1865, Issue 4, April 2020, 158594

https://doi.org/10.1016/j.bbalip.2019.158594

Ketogenic Diet: A New Light Shining on Old but Gold Biochemistry, Review article, Raffaella Longo, Carolina Peri, Dalma Cricrì, Lara Coppi, Donatella Caruso, Nico Mitro, Emma De Fabiani, Maurizio Crestani, Nutrients, 2019, 11(10), 2497

https://doi.org/10.3390/nu11102497

Congress proceedings

Selected Abstract - SITeCS Congress 2022 - Role of histone deacetylase 3 (HDAC3) in adipose tissue metabolism and immunophenotype, Lara Coppi, Carolina Peri, Fabrizia Bonacina, Raffaella Longo, Dalma Cricrí, Silvia Pedretti, Rui Silva, Ilenia Severi, Antonio Giordano, G. Danilo Norata, Alberico L. Catapano, Nico Mitro, Emma De Fabiani, Maurizio Crestani, European Atherosclerosis Journal 2022;3:82-83

https://doi.org/10.56095/eaj.v1i3.22

Proceedings from the 4th European Summer School on Nutrigenomics (ESSN 2021) - Role of Histone Deacetylase 3 (HDAC3) and Downstream Players in Physiopathology of Adipose Tissue, Lara Coppi, Carolina Peri, Raffaella Longo, Nicolas Guex, Tiziana Caputo, Béatrice Desvergne, Maurizio Crestani, Lifestyle Genomics (2021) 14 (3): 91–116.

https://doi.org/10.1159/000517609

OTHER INFORMATION

Digital skills

Microsoft Office: Microsoft Word | Microsoft Excel | Microsoft Powerpoint | Microsoft Outlook

Video conferencing: Microsoft Teams | Zoom | Skype | Google Meet

Social media: Facebook | Instagram | Twitter

Bioinformatic analysis of genomic data: Gene Set Enrichment Analysis | Integrative Genomics Viewer

Graph & Statistical analysis: GraphPad Prism

Figures: Biorender

Student Committee's member of International Conference on the Bioscience of Lipids (01/2021 – Current)

Laboratory tutor in Biochemistry course of Biotechnology Bachelor's Degree (12/2020 – Current) Main activities and responsibilities: Total protein quantification assay - Genotyping of a genetically engineered mouse model - Extraction and purification of genomic DNA
Teaching assistant in Biochemistry course of Biotechnology Bachelor's Degree (09/2020 – Current) Main activities and responsibilities: Lesson topics: Protein function, spectrophotometry, and chromatography
Tutor for internships and co-supervisor of students enrolled in the master's and bachelor's degree in Biotechnology and the master's degree in Pharmaceutical Chemistry and Technology (03/2020 – Current)

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: Milan, 09/09/2023